California State Journal of Medicine.

OWNED AND PUBLISHED MONTHLY BY THE

Medical Society of the State of California

PHILIP MILLS JONES, M. D., Secretary and Editor

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ADDRESS ALL COMMUNICATIONS

Secretary State Society, State Journal, Official Register, } Office Room 1, Y. M. C. A. Bldg., San Francisco.

IMPORTANT NOTICE!

All Scientific Papers submitted for Publication must be Typewritten. Notify the office promptly of any change of address, in order that mailing list and addresses in the Register may be corrected.

NOVEMBER, 1904.

THE NEXT A. M. A. MEETING.

The next meeting of the A. M. A. will be held at Portland, Oregon, July 11-14, 1905. Applications for membership may be secured at the office of the Society, Room 1, Y. M. C. A. Building, San Francisco.

EDITORIAL NOTES.

VALUABLE CONTEMPT.

On September 30th Dr. W. A. Whitlock, of Merced, was called as a witness in the superior court to give evidence in a case there pending. He gave all of the general evidence asked, but when the attorney for the defendant asked for expert evidence relating to certain facts about a gunshot wound, Dr. Whitlock refused to answer, on the ground that such testimony was expert evidence, and that the witness should receive proper compensation for his time. The court adjudged him in contempt, and sent him to jail, as he persisted in refusing to answer the questions. Later the district attorney visited him in jail and agreed to approve his claim for $50.00 if he would consent to testify. This he did, and was released. Dr. Whitlock says: "I went to jail to protect the rights of the profession, and would have been there yet if the district attorney had not come to my terms." Certainly, if the facts as reported to the JOURNAL are correct, and we have no reason to doubt them, the physicians of this state are indebted to Dr. Whitlock for his courage in sticking up for his rights and the rights of every expert witness.

ANOTHER JOURNAL.

In September the oldest medical society in the United States—the Medical Society of New Jersey—commenced publishing its transactions in the shape of a monthly journal, with the title *The Journal of the Medical Society of New Jersey*. Dr. Richard C. Newton, of Montclair, is the editor, and Drs. W. J. Chandler, D. C. English and H. W. Elmer are the members of the publication committee. The appearance, make-up and contents are excellent, and there seems little doubt that the journal will succeed under the able editorial guidance of Dr. Newton. The policy announced by the journal is one of clean and decent advertising, and the chairman of the publication committee writes us that he will do all in his power to see that the advertising pages are kept clean. Too many state society journals have followed the pernicious example of the *Journal of the A. M. A.*, and have accepted pretty much anything offered. We sincerely trust that New Jersey will stick to the policy announced, and keep its self-respect. The society was founded on July 23d, 1766, and has a long and honorable record. We wish the newest state society journal every success, and particularly that it may keep from the unenviable advertising entanglements that the trustees have let the *Journal of the A. M. A.* get into.

LICENSE REVOKED.

In all human probability we have seen the last of the so-called "Chamley case." After dragging its weary way through the courts since August, 1903, decision has finally been handed down and recorded. The certificate of Dr. S. R. Chamley was revoked by the Board of Examiners at a meeting held August 4th, 1903, under authorization of the act creating the board. There were present at this meeting Drs. Tait, Osborne, Buell, Perce, Thorne, Buteau and Gere, and all voted in favor of the action taken. The action against Dr. Chamley was initiated by Mr. J. M. Nevin, and was based on that portion of the state law printed on page 202 of the sixteenth edition of the Register: "Fourth—All advertising of medical business in which grossly improbable statements are made." Dr. Chamley's advertising statements were certainly "grossly exaggerated," and it is not improbable that he was responsible for the death of a number of unfortunate persons who fell into his hands. In the evidence before the examiners at the session when his certificate was revoked, one witness stated that the death of Mrs. Nevin was probably due to his improper treatment, and that Mr. Nevin suffered a great shock at his wife's death, and that he died very shortly thereafter. The formal complaint in the case cited an advertisement appearing at that time in the *Examiner*, reading: "I will give $1,000 if I fail to cure any cancer or tumor. . . . A hard lump on the lip, face, or anywhere, is cancer. . . . Any lump in a woman's breast

is cancer." That sort of thing is not only gross exaggeration, but it is well calculated to produce an immense amount of harm. It is highly improbable that the supreme court will be called upon to again pass upon any phase of the medical law. While it is true that this particular portion of the law was not considered in the now celebrated case, *ex-parte Gerino*, still the general provisions of the act were so fully passed upon in that decision that the matter is practically a closed incident. The board is to be congratulated upon its action and upon the result of its labors. There are other holders of certificates who should be dealt with, and it is to be hoped that members knowing of such cases will file charges before the board. The board cannot originate complaints, but it will be very glad to receive them.

FINSEN'S DEATH.

Niels R. Finsen died in Copenhagen, Denmark, on September 24th. For fifteen years he had worked carefully, scientifically and conscientiously, in the field of phototherapy, and his results have been brilliant. Seldom, in the practical application of medicine, do we see the methods of exact scientific research brought into active play; yet accuracy of just this sort characterized all of Finsen's work, and his reports are almost above criticism. In 1903 he was voted the Nobel prize, and turned the money over to the Finsen Institute. His personal, as well as his professional life is reported to have been such as to serve as a practical lesson in honesty and uprightness in scientific work as in every-day life.

THE CASE OF DIDDLE.

We are advised by the Pacific Mutual Life Insurance Company that Diddle was never appointed an examiner for that company, and that he has made but six examinations altogether for it. These were accepted for the reason that it did not know he was an unlicensed physician, and for the further reason that there was no other physician in the community. Excellent recommendations are filed with the company, commending Diddle highly, and it probably did not occur to anyone to see whether he had a license. We would respectfully urge upon all life insurance companies the necessity for doing something more than merely getting a couple of references; they should make sure that the applicant is licensed. Through an unfortunate phraseology of the editorial in question, the inference might be drawn that this company paid less than the regular $5.00 fee for examinations. This is not the case. The medical director of the company, an ex-president of the State Society, no less a person than the State Society's good friend Dr. Cluness, has for years been on record as highly approving the minimum fee of $5.00 for all examinations.

ANOTHER CONVICTION.

Last month the JOURNAL referred to the case against one "Dr." Perhacs, in Tuolumne county. We are very glad to be able to report that on the 13th of October Perhacs came into court and asked to change his plea from "not guilty" to "guilty." This the court allowed, and the defendant then asked that he be sentenced immediately. In accord with his request, the minimum fine of $100.00 was assessed, which he paid at once. Dr. W. H. Roberts did excellent work in securing the evidence for this conviction and in pushing it to the end. He is to be congratulated.

THE LAY TREATER.

Elsewhere in the JOURNAL is a letter asking information as to the attitude which the physician should assume toward the non-medical person who uses X-ray or electrical apparatus in the treatment of patients for doctors. The JOURNAL has also received a circular signed by a Mrs. H. M. Ames, Jr., San Francisco, setting forth the fact that she is prepared to treat patients by the Finsen light apparatus, and offering to pay to physicians a commission of $1.00 per treatment for each patient referred to her. The opinion of practically all reputable physicians is that such conduct, among physicians particularly, is decidedly reprehensible. The physician should charge the patient what he thinks right and proper, but should not be a party to a scheme for getting more money out of him by the "commission" process. The question is a new one, and should receive the attention and discussion of the medical profession.

OAKLAND AND VACCINATION.

Oakland is in grave danger of obtaining decidedly undesirable distinction, not to say notoriety, as an anachronous community. For the opening years of the twentieth century to see enacted or permitted an upsetting of the wise rule of compulsory vaccination of school children is, to put it very mildly, peculiar. It would be a waste of good paper and ink to point out the value of regular and compulsory vaccination requirements. The physicians of Alameda county, and of Oakland especially, should ponder upon the possible result of allowing the anti-vaccination craze to live and grow. Less somnolent parts of the state will certainly object to unchecked travel, in the event that smallpox appears in Oakland, and that beautiful city will then find itself—quarantined. This would be both awkward and unpleasant, and the only consolation that could be offered would be to send them some of the "hints" fathered by the San Francisco Board of Health for the benefit of "the families of infectious, contagious and communicable diseases." Wake up!

WATCH THEM.

This number of the JOURNAL will reach you just before election. If you, or your county society, have not asked your nominees for the state legislature to express themselves regarding their attitude toward the medical law, do so at once. Before election is the time to find out how a man stands; then you can vote accordingly. Some weeks ago the secretary of the State Homeopathic Society joined with the secretary of your society in sending out a circular letter to some 125 nominees (all we could get the addresses of at the time), stating that the law was satisfactory to the societies and to more than two-thirds of all physicians in the state, and asking that it be left strictly alone. Fifteen replies have been received, from the following nominees: W. H. Wickersham, Henry W. Lynch, J. C. Coyle, T. E. Atkinson, Frank R. Devlin, F. A. Duryea, N. K. Foster, G. R. Lukens, H. S. Y. McCaddney, C. M. Drew, John A. Goodrich, Edward F. Treadwell, J. Clem Bates, J. J. Burke, William H. Waste. There has been some gratuitous legal advice handed in with this correspondence, but practically these gentlemen have stated that they will stand for the law as it is. In Santa Cruz, Monterey, Sacramento and Santa Clara counties the nominees have been interviewed and the attitude of the profession very plainly expressed to them; their medical constituents are watching them, and will not forget how they act. Similar action should be taken in every county in the state. There seems little doubt that the Eddyites, the faith-curers, the quacks and, unfortunately to relate, some otherwise apparently respectable physicians, have combined in the getting together of "a sack," with the object of emasculating the present good law. Watch your nominees, and let them know before election how you stand, and how you want them to stand. Beware of the silent man.

AN EASY ANALYSIS.

The manufacturers of uriseptin, who kindly furnished us with a fake formula, have been for some time past flooding this part of the country with circulars that would be intensely funny were it not that they undoubtedly impose on a number of physicians. The circular gives some wonderful "tests" for lithium and formalin, which really are no tests at all. The argument is about as rational as one suggested by a chemist when he saw one of the circulars. "We make bicarbonat of mucillage. True, chemists say there is no such thing, but we know better. Prove it for yourself. Drop some acid on our preparation and see it effervesce; that proves it is bicarbonat. Now take a dose and then lick a postage stamp; if it sticks, that proves it is mucillage and we are vindicated; the chemists are all wrong. We do make bicarbonat of mucillage." How long are we going to stand such idiotic rot as this?

TWO NOTABLE RETIREMENTS.

Dr. Shrady has relinquished the editorial control of the *Medical Record*, after holding it for more than forty years, and Dr. Koenig has resigned his position as editor and publisher of the *Pennsylvania Medical Journal*. Much has been said in the medical press about Dr. Shrady and his retirement. He started the *Record*, and it has been his hand that has built it year by year; his brain has guided its career from the littleness of beginning to the bigness of its present position. He leaves the editorial field with the hearty good wishes of every medical man who knows either the *Record* or the man who has made the *Record*. Of Dr. Koenig scarcely a paragraph has been printed, though his work was, if anything, greater than Dr. Shrady's. Seven years ago he undertook to do what no one believed could be done: the publication of an absolutely clean and ethical medical journal that should be entirely free from all question of commercial control. He started the first State Society Journal, and for seven years edited and published the only medical journal ever published in this country which has never contained one line of questionable advertising. Thus his example has been in two directions, and enormously valuable. He demonstrated that a state society could successfully publish its transactions in journal form, and he also showed in no questionable manner that such a journal can be absolutely clean and independent. The work of Dr. Koenig has been no less important, if indeed time will not show it to have been immensely more valuable, than that of Dr. Shrady. Every self-respecting physician in this country who possesses a healthy understanding of medical ethics, written and unwritten, owes a debt of gratitude to Dr. Koenig that he can never sufficiently pay.

THE SWING OF THE PENDULUM.

Motion is one of the fundamental laws of the universe; nature seems to abhor rest. We seldom see anything remain for long perfectly quiet and unchanging. And so, largely, it is with human nature; we either progress or retrogress; we do not, for long, remain in *statu quo*. Things, conditions, movements, what you will, take to themselves small beginnings and slowly grow; we become aware of them, but are tolerant; they increase, and we notice them; they wax great, and if they are evils, we bear with them; they wax greater and become more pestiferous evils, and then comes a reaction. We no longer tolerate them with a shrug of the shoulder; we no longer writhe impotently; we no longer exclaim, "But what can one do?"—we get up and exhibit the law of nature—motion. Such a cycle has been, since a time when the memory of man runneth not to the contrary, likened to the swing of the pendulum. Has the nostrum evil within the medical profession reached its limit, and is the reaction about to set

in? These are grave questions, but from the letters that come to us from all over the country, from almost every state in the union, commending the JOURNAL for its outspoken attitude and praising the society for having the courage of its convictions and for pointing out rottenness where it exists, we are led to hope that a change may possibly occur. For years every right-thinking man in the country has known that the advertising pages of the *Journal of the A. M. A.* were worse than rotten; yet no one cared to speak the first energetic word. Your society has done so, however, and the ball has started rolling. Note the result: The *Journal of the A. M. A.* has adopted, in slight measure, our rule in regard to printing the formula of a proprietary medicine with the advertisement. They do not make any acknowledgment for the suggestion, and we do not ask it; we only ask that it be done. If it can be done in three or four instances it can be done in each and every case. Do not falter, you gentlemen of the trustees; keep at the good work. Take as your instructions from the Association that portion of its Principles of Ethics which says that "It is equally derogatory to professional character for physicians to dispense or promote the use of secret remedies." And please remember that a mere qualitative formula, such as that you are printing with the advertisement of Mey's poultice, will not answer; the physician should know *how much of what*, he is using.

MEDICINE MADE EASY.

It is really astonishing how easy the practice of medicine has been made, of recent years, by the ever-ready, ever-watchful, ever-helpful manufacturer of ready-to-take medicine! Suppose a patient comes to you with a bad burn. You do not need to devote any particular time to studying the case, nor to ascertaining the special character of the burn. Just turn to your medical journals and glance through the advertising pages. You find: "Fire burns, sun burns, burns by gasoline, cuts and sores, wounds galore, are healed by Unguentine." What more do you want? Just slap on "unguentine" (whatever it may be; you do not know, but that does not matter; the kindly disposed manufacturer tells you to) in liberal quantities, collect your fee (this is necessary, for the "unguentine" must be paid for) and let the patient go. Suppose the patient has chronic constipation. Again turn over the pages of your journals (of course we mean the advertising pages)—or if you do not feel that you can afford a liberal education by taking several journals, take one, and study the advertising pages of the *Journal of the American Medical Association.* Here you find exactly what the patient wants: "Lapactic pills, the 20th century conqueror of chronic constipation." Do not be so foolishly impertinent as to ask or to want to know what the patient will be taking if you give him "lapactic pills"; just do what you are told. Perhaps his constipation may come from some cause that needs your prompt and skillful attention in other ways; but take the chance and practice "medicine made easy, or the doctor's friend." Carefully preserve the advertising pages of the journal for a year and you will have a ready-reference library that will instruct you at once and authoritatively as to exactly what to give in any case. The patient will probably take a good deal of the same stuff under different names and without your knowing it, but that does not matter; each kind is the best.

PURE FOOD AND DRUG BUREAU.

The postponement of national systematic drug analyses by the House of Delegates of the American Medical Association is, under the circumstances, a wise movement. The difficulties in any practical execution of the task seem at present insuperable. Perhaps, after all, the existing agencies, if properly and adequately utilized, are enough to bring about the reform in a slow and more certain manner than by any complex and official organization. While such widespread and powerful interests exist against thoroughgoing reform, and while even chemic experts in one way or another may still be bribable, there must be recognized great dangers in carrying out the absolutely exact analyses and complete publication of the results. Any plan that gives only the analyses of the good and really "patent" products while remaining silent as to fraudulent and secret ones, cannot command much following or bring about revolutionary changes. One of the essential conditions of progress seems to be the enactment of the Hepburn Pure Food Bill by Congress, and to this end physicians should give every aid in their power. Why should not Drs. Ellis, Jones and others establish their bureau without the sanction and support of the American Medical Association and the American Pharmaceutical Association, and give the professions the benefit of its workings? In the meantime there is a vast deal of practical reform possible, based upon the reports of the published analyses of State Boards of Health and of the United States Department of Agriculture.—*American Medicine.*

Does Dr. Gould intend to imply that the chemic experts of a bureau run without the sanction and support of the American Medical Association and the American Pharmaceutical Association, by "Drs. Ellis, Jones and others" would be less subject to corruption—less bribable—than the chemic experts of a bureau established and directed by the House of Delegates of the American Medical Association? The imputation on the latter is a grave one.—*Am. Med. Journalist.*

[Indeed it is, especially when it is remembered that several members of the House of Delegates expressed, as the reason for opposing the plan, the opinion that unscrupulous manufacturers would soon own the whole A. M. A.! As a matter of fact, it was the agent of one manufacturer who, somehow, was a delegate, and did most of the talking against the plan proposed. He also admitted that he knew nothing about it.—Ed.]

The Blind Boycotted.—The *Medical Times* arraigns the San Francisco labor unions for putting a boycott on brooms made at the blind asylum in Alameda county. It says: "Labor unions have, from time to time, done many a thing to indicate a reversion to complete savagery and most brutal animalism, but it is certain that there is no word in any existing dictionary sufficiently forcible to characterize the attitude of the labor unions of San Francisco."

COMMUNICATION.

THE A. M. A. FINANCIAL STATEMENT AGAIN.

To the Editor of the STATE JOURNAL: The marked copy of your JOURNAL received. I suppose you send to me as chairman of Board of Trustees expecting a reply to what you would term your open letter. You wish to know what we are going to do with the *Journal of the A. M. A.* To answer that question briefly: We hope to continue to keep it, as we now believe it to be, the leading medical journal of these United States—the peer of any in the world.

To keep it there, the questions of dollars will have to be one of the considerations, as it is of all successful business enterprises. Had you carefully read the report, or even been generous enough to your subscribers to have printed it in *full*, there would have been no need of your editorial. The report speaks for itself. You correctly state the net profit of the business of the *Journal*. Had you copied from the report the amount received from advertising you could have placed before your readers the fact that the *Journal* received last year from advertisements $88,533.65. Had you given your readers fairly all the sources of income of the *Journal* they could easily have answered the conundrum which you thought you were propounding. With a profit of $38,000.00 and an income of $88,000.00 from advertising (using round numbers) where would the *Journal* have been without the advertisements? The answer is (for fear you will not give it to your readers) $50,000.00 on the debit side of the ledger.

I am surprised that you will attempt to make your readers believe that the "dues" is no part of the *Journal* income. You do not appear to be aware of the fact that the $63,237.48 entered as membership dues is the amount paid by members of the association as subscribers to the *Journal*, receiving the *Journal* by virtue of paying their membership fees of $5.00 each year and that for 1903 the above amount of $63,237.48 was collected.

There was in an old copy of logic once in my possession the following specimen of a syllogism: "Light dispels darkness; feathers are light; therefore feathers dispel darkness." Your reasoning could be thus placed: "Good advertising mediums for proprietary medicines make money; the *Journal of the A. M. A.* makes money as at present managed; therefore the *Journal of the A. M. A.* is a good advertising medium for proprietary medicines."

But to come down to the question at issue about the *Journal* being used for the sake of the getting of "filthy lucre" as the "greatest advertising medium for proprietary medicines in this country." The writer of the editorial certainly does not know, or if he does know, wishes to produce the impression upon the minds of his readers to the contrary, that **the advertisement of no internal proprietary medicine is permitted in the *Journal's* pages, which is not accompanied by a verified statement of all the ingredients entering into its composition and that this formula is published at least once in connection with the ad.;** generally several times. The minutes of the meeting of the Board of Trustees show that the same order has been issued, and the same stand taken in regard to external remedies in future.

A report was made to the House of Delegates showing that more than $8,000.00 of advertising had been rejected for the year 1903 because the ads were unethical, or advertised directly to the laity (*Journal A. M. A.* June 18, 1904, pp. 1639). The same can be said of the report of last year (see page 1311, *Journal* May 9, '03). You should have been fair enough to have copied from the written report of the trustees the following, which relates to advertisements (see page 1636): "During the past year (1903) the *Journal* has been more strict regarding accepting advertisements, and a large number of advertisements carried by other medical weeklies have been declared unacceptable to its pages. Most of them have been declared unacceptable for the reason that they were considered secret proprietaries. A few, however, were rejected because they advertised directly to the laity."

To show that the policy of the Board of Trustees has redounded to the general good of the *Journal*, it is only necessary to compare the now *Journal* with that issued in 1898 and to compare its financial condition at the end of the fiscal year Dec. 31, 1897, as shown on page 1310, *Journal A. M. A.*, May 9, 1903 (or going back to the original report of the Board of Trustees read by the venerable, and beloved Dr. A. Garcelon at Denver, June 25, 1898, page 1532, *Journal A. M. A.*).

At that time the Association owned a few presses and other machines, together with a little office furniture, and was doing business in a hired house. The total *Journal* business, including cash on hand, in 1898 was $47,140.07. The condition of the *Journal* as shown by balance sheet of June 30, 1904, is as follows: Real estate, including *Journal* office and five residences on the block of ground owned by the Association, $94,747.11; machinery, furniture and fixtures, $34,764.68; bonds, $40,199.38; library, $1,000.00; about $26,000 in cash in treasury and *Journal* office; total, $196,711.17—not taking into consideration any accounts due the Association, etc., showing in round numbers a net gain of $150,000.00 since the Denver meeting.

The Association has its own *Journal* office; its machinery; and is so situated as to enlarge the plant as the growth of the Association and its publishing interest may demand. The section reprints are published and bound in the *Journal* office. This tells what has been done with *dollars*, dirty and clean, that have been earned by the *Journal* from subscriptions, dues, and advertisements. Your Board of Trustees thinks this money has been well used; the House of Delegates appears to have thought so too. We reported to the House of Delegates in Atlantic City in June, 1904, that $40,000.00 of the desired $150,000.00 reserve or surplus fund had already been provided and invested in 4 per cent interest-bearing securities and suggested that this $150,000.00 reserve fund should be set aside "before any change should be made in its fiscal policy." This fund should not be laid up at the expense of the *Journal*, that is by curtailing it in any way, but by avoiding extravagant, and for the present, injudicious expenditures of money. (See *Journal A. M. A.*, June 18, '04, bottom page 1658 and top page 1659.) **As the *Journal* gets to be stronger financially it will be able to strike out every advertisement about which any question could be raised by the most extremely ethical faddist.**

Having criticized the board in your JOURNAL, as chairman of the board I feel that this reply to your open letter should be printed in your JOURNAL and further that you should give your readers the benefit of a complete publication in an early issue of your JOURNAL of the entire report.

Respectfully,

T. J. HAPPEL,

Chairman Board of Trustees.

[We take pleasure in publishing the above letter from Dr. Happel. It is hardly possible to give space to the entire report of the trustees, but below will be found the principal part of the financial statement. It would appear from the above letter that membership in the Association is regarded as a sort of premium poster attached to the *Journal*. The dues are just that and would exist if the *Journal* did not; hence it is not fair to credit them bodily to the *Journal* income. In regard to the advertising question, if Dr. Happel will kindly have the *Journal* pub-

lish a statement setting forth just when and where, in its pages, it printed the full quantitative formula, covering all of the active ingredients of the following preparations, we will be very glad indeed to make any sort of an apology he or any other member of the board may desire: Panopeptone, chionia, benolgur, uriform, unguentine, cactina, seng, Kutnow's powder, pepto-mangan, Gray's tonic, listerine, uriseptin, ergoapiol, Mey's poultice, tongaline, somatose, aseptinol, chiolin, Colden's liquid beef tonic, hemaboloids, triferrol, arsenauro, gonosan.

It would also be interesting to know whether the formula of uriseptin filed with the editor is the same formula which the concern formerly printed with their advertisement; if so, it is a lie, and the editor has been more than once advised of that fact.

The portions of the above letter emphasized are those which bear directly upon the advertising question. Anyone who desires may figure out the financial matters from the following reprint.—Ed.]

EXHIBIT "A."

Revenue account for the year ending Dec. 31, 1903.

Subscriptions collected during year		$52,567.38
Membership dues		63,237.48
Advertisements		88,533.65
Jobbing		8,669.11
Books		2,395.32
Rents of Association properties		2,185.00
Buttons		567.75
Miscellaneous sales		146.83
Interest on bonds		560.00
Inventory of paper, type and metal Dec. 31, 1903		5,562.00
		$224,424.52
Publication Expenses—		
Paper	$52,720.70	
Ink	2,055.95	
Type, metal and electros	3,488.94	
Salaries and pay rolls	57,067.34	
News, reporting, etc	6,628.17	
Binding	309.21	
Machinery, repairs and renewals	1,228.19	
Advertising and subscription commissions	8,258.72	
Postage, first and second class	15,330.96	
Power, fuel and light	3,049.07	
General expense	2,921.21	
Exchange	279.99	
Collection fees	1,033.12	
Discount	1,694.55	
Factory supplies	832.31	
Office jobbing	1,888.00	
Transportation	1,385.28	
Express and cartage	916.34	
Bad debts less recoveries	1,642.76	
Depreciation of machinery and furniture and fixtures	3,798.33	$166,529.13
General Expenses—		
Organization expense	$5,323.19	
Association expense	6,629.80	
Auditing accounts	175.00	
Miscellaneous expense	783.40	
Building expense	525.71	
Buttons	808.85	
Insurance and taxes	1,257.01	
Depreciation of buildings	4,290.37	$19,793.33
Net revenue for the year ending Dec. 31, 1903		38,102.06
		$224,424.52

EXHIBIT "B."

Balance Sheet—Dec. 31, 1903

Assets.

Real estate and buildings			$96,163.71
Machinery			30,703.70
Furniture and fixtures			3,481.10
Library (estimated)			1,000.00
Inventories of type, metal and paper stock			5,562.00
Bonds (par value $14,600.00)			15,168.13
Bills receivable		$1,172.32	
Accounts receivable	$41,008.39		
Less reserve for unearned advertising	31,206.92	9,801.47	10,973.79
Cash on hand in bank			6,147.35
			$169,199.78

Liabilities.

Accounts payable		$154.63
Sectional reports paid in advance		455.00
Surplus:		
Balance as at Jan. 1, 1903	$127,980.47	
Add:		
Inventory of books, furniture and fixtures not previously taken into account	1,121.09	
Profit on machinery sold during the year	1,386.62	
Net revenue for the year, as per account annexed	38,102.06	168,590.15
		$169,199.78

EXHIBIT "C."

Disposition of surplus for the year ending Dec. 31, 1903.

Increase in Assets—		
Real estate and buildings	$14,952.77	
Machinery	13,529.30	
Furniture and fixtures	1,129.40	
Library	1,000.00	
Inventories of type, metal and paper stock	3,154.33	$33,765.80
Decrease in accounts payable		9,895.04
		$43,660.84
Decrease in Assets—		
Bills and accounts receivable	$2,775.97	
Cash	275.19	3,051.16
Surplus for the year		$40,609.68

SUGGESTION REGARDING CLINICAL MATERIAL.

To the Editor of the STATE JOURNAL: I wish to call your attention to what seems to me the lamentable dereliction of duty by the profession of San Francisco.

In this city is a vast amount of clinical material with facilities for demonstration that are unequaled west of Chicago. So far as I am able to judge, there is no reason why San Francisco should not be a resort for clinical study, if those who have material at their disposal would afford opportunities for investigation. Judging from opinions expressed by medical men who have visited the city, and from the actions of those who have the chance to make this a clinical center, it would seem that most of the men whose province and privilege it is to teach, desire to hide their work, or are ashamed to make it public.

In any city in the east, all clinics given, either medical or surgical, are bulletined so that medical men can select, some days ahead, the work they wish to see. There is no reason why this should not be the course pursued here, unless the work done is of such a character that publicity is not advisable. All of the profession holding either public or private clinics ought to give visiting or resident physicians, and students of the various colleges in the city, an opportunity to see and to hear them. To accomplish that purpose, either the County Medical Society, the State Medical Society, or whatever organization seems best, should furnish facilities, to those that wish to do so, to post notices a few days ahead, that all who desire to avail themselves of the privileges offered, may take advantage of the opportunity. This will apply particularly to the various hospitals, but does not bar members of the profession, not connected with them, who have interesting work that they may wish to demonstrate.

The office of the CALIFORNIA STATE MEDICAL JOURNAL, or the library of the County Medical Society, being convenient and centrally located, would be the proper place for such a bulletin board. The notice of a clinic could be sent by mail and posted at least twenty-four hours before the clinic is to be held. All of the profession know the convenience and the value of such information. San Francisco is, and should be, the center for medical training of the west.

GEORGE GOODFELLOW.

[The suggestion made by Dr. Goodfellow in the foregoing letter seems to be a most excellent one. There is certainly a great deal of work being done in this city which should be of more value than it is. Not a week goes by but that some doctor from out of the city comes into the JOURNAL office and asks for information more or less along this line. Doubtless, too, there are a number of men holding either medical or surgical clinics, or operating at the various hospitals, who would be more than willing to demonstrate their work to their fellow practitioners from outside the city. So far as the office of the State Society is concerned, the secretary is quite willing to be the distributer of information and to receive and post all notices of the sort suggested by Dr. Goodfellow. The suggestion is so good and so timely that something ought to come of it.—Ed.]

A Question.

To the Editor of the STATE JOURNAL: A few words of commendation, a criticism, and a question; then I am done. I regard the CALIFORNIA STATE JOURNAL OF MEDICINE, on account of the principles for which it is striving, as the ideal medical publication. It is the desire of the State Society that its JOURNAL represent the Principles of Ethics in their purity, and you are certainly to be commended for carrying out the wishes of the Society in such a fearless and faithful manner. My criticism is in regard to the type used in printing many, if not all, of the original articles; it is entirely too fine and causes considerable ocular effort in perusing such articles. Am in hope that the finances of the Society will soon permit a change in this respect so that all original communications may be presented in type of similar size to that in which the editorials are printed. The question: What should be our position in reference to referring patients for treatment or diagnosis or having work done by laymen who claim proficiency in the use of the X-Ray and other electro-medical apparatus? Yours sincerely,

JOHN T. RANKIN,

Braly Bldg., Los Angeles.

[Will the members of the Society, who have considered the point raised by Dr. Rankin in regard to non-medical X-Ray operators, be good enough to forward their views to the JOURNAL office?—Ed.]

The Druggist Question.

To the Editor of the STATE JOURNAL: I have received two numbers of the CALIFORNIA STATE JOURNAL OF MEDICINE and read them carefully. I am delighted with the ethical tone of the JOURNAL. It is nearly alone in the stand it has taken on the advertising question, and is the nearest right of any medical journal I know of. I hope it may long maintain its position and not be enticed into questionable commercial methods as so many have been.

There is one important matter that I wish to call your attention to, viz: the attitude of the N. A. R. D. towards the medical profession. That wonderfully virile association is bending all its power to the task of stopping the cutting of prices, principally of the innumerable "patent medicines" of this country. It is trying to help the retail druggist. In doing so it has promulgated the doctrine that no wholesale druggist shall sell medicines to physicians, and that physicians shall not put up their own prescriptions if they want to. Is it not about time for the medical profession to organize and have drug stores established, where nothing is sold but the medicines and remedies actually prescribed by physicians? While I appreciate highly what the pharmacists have done for medicine, yet it seems to me that the druggists everywhere in this country are so much under the influence of the nostrum vendors and the proprietary medicine firms that physicians are about to get the "horse laugh" as a set of "good things" who do not know anything about their own business. When one of our patients takes a prescription into a drug store to get it filled he or she has to run the gauntlet of a hundred or two nostrums, in all the glory of glaring labels telling the patient or his or her friend that there is no need to fee a doctor for a prescription, as there is a better, cheaper and surer medicine in the patent packages or bottles than any physician can prescribe from the materia medica. And our good friends, the druggists, who frequently bribe us by donating thermometers, handbags or pocket cases, and a variety of things for our personal use, scatter the handbills and samples of the nostrum makers broadcast over the front yards of town and country, and have flaming posters on every available space inviting the dear people to come and buy the patents and be cured. Is this insult to be forever continued and the medical profession take no means to prevent it? I think the suggestion I have made is worthy of consideration and should be brought before the whole profession of the United States. Drug stores for putting up prescriptions and selling surgical supplies, would do more for the elevation of the medical profession than any one thing I can imagine.

THOS. W. MUSGROVE, M. D.

AN OBJECT ACCOMPLISHED.

When, in June, 1897, the publisher of this journal assumed the responsibility to publish the transactions of the Medical Society of the State of Pennsylvania in journal form, he had in view the accomplishment of two special objects, namely, to prove that it could be done without the aid of the quack medicine advertisers, and also to show that the transactions of a state society published in journal form were of much greater value to such an organization than when issued in book form. As this latter was an experiment among state medical societies, it was looked upon with considerable misgivings by many members, but the results accomplished by the Medical Society of the State of Pennsylvania under this arrangement, and its adoption by some ten or twelve other state societies, also apparently with good results, proves the wisdom of the plan of publishing the transactions in monthly installments. We claim for the Medical Society of the State of Pennsylvania the position of pioneer in establishing the merits of this plan.

With regard to the advertisements, we feel that the most ethical member need blush at nothing that has appeared in this journal, and it should not be forgotten that it was not for lack of opportunity that unethical advertisements were not abundantly represented.

The publication of a medical journal, and especially one representing the transactions of a great medical society, should be as free from commercialism as is the daily life of a physician actuated by the highest motives of humanity, and no one will deny that to encourage the use of unethical remedies tends to injure the sick and afflicted rather than to benefit them, and the only advantage, therefore, that can accrue is represented by the monetary consideration.

Working for results believed to be of great benefit to both the profession and the public, the publisher has found much pleasure in his labor, but other responsibilities devolving upon him render it imperative that this work shall be carried on by other hands, and with this issue, therefore, the active participation in the publication of the transactions by the present publisher will come to an end.—Dr. Kœnig, in the *Pennsylvania Medical Journal.*

THE OPERATIVE TREATMENT OF PES CAVUS.*

By HARRY M. SHERMAN, A. M., M. D., San Francisco.

I HAVE always found the deformity called "hollow clawfoot," *Griffe pied creux*, a difficult condition to manage. It is true that section of the plantar fascia and a forcible extension of the forepart of the foot upon the hinderpart, and perhaps an achillotomy added to correct the relation of the foot to the leg, has overcome the deformity; but the position gained has not been maintained, and I have been correspondingly disappointed. The fault in this operation lies in the fact that no force is arranged for *in the foot and leg* to maintain the corrected position, and an extraneous retentive force is either painful or inefficient.

In the feet which I have seen, the deformity has quite plainly been due to paralysis of the plantar interossei and lumbricales. Normally, action of these muscles, holding the toes straight or even a little flexed, transfers the extensor effect of the long toe extensors—that is, the extensor proprius hallucis and the extensor communis digitorum—from the toes to the metatarsus, and extends it on the tarsus. Paralysis of these two sets of muscles, plantar interossei and lumbricales, permits the action of the toe extensors to be expended wholly on the toes, pulling them into marked hyperextension, and permitting the metatarsus to stay in or go into a flexed position on the tarsus. The long toe extensors, with the combined action of the plantar interossei and lumbricales, are consequently the chief metatarsal extensors; the effect of the tibialis anticus and the peroneus tertius on the metatarsus is not very great; and the metatarsus has no special extensor muscles of its own.

The proposition was a simple one; give to the metatarsus extensor muscles to antagonize the flexor force of the plantar groups and so prevent persistent midtarsal and tarso-metatarsal flexion with consequent retraction of the plantar fascia. The needed muscles were found in the long toe extensors themselves, and the operation I have done has been to cut the tendons of these muscles from their insertions into the toes and transplant them into the metatarsal bones just behind their heads.

I have formulated and followed the following technic:

1. Because of the difficulty of holding a foot in a certain position while five tendon-sutures were applied I have, after such subcutaneous sections of fascia and tendons, and such manual or instrumental remodeling as was necessary to correct a malposition or deformity, put the foot into a plaster of Paris splint in the corrected position. Then, immediately after the setting of the splint, I have cut away so much as was necessary from the dorsum, exposed the field of the operation, and been able to do the work on the tendons quietly and without the danger of any slipping of the foot, which might tear out some of the earlier sutures while the later ones were being placed.

2. Because of the practical difficulty in putting the tendon under the periosteum of the metatarsal bone, and suturing it there while working wholly on the dorsum and in a somewhat limited space, I have carried my sutures directly through the foot and the plantar part of the splint, and have fastened them firmly on the outside of the latter. In this way I can hold the tendon closely against the denuded bone under the periosteum, and can maintain the position as long as an absorbable suture will last, and that may be about forty days, if chromicized catgut is used.

The details of the operation are as follows: Sterile gauze kerchiefs are disposed about the foot and next

*Read at the Meeting of the American Orthopedic Association, Atlantic City, June 11, 1904.

Fig. 1. Sterile gauze kerchiefs on the foot before the application of the plaster of Paris splint.

to the skin, so that they can be folded back after the opening in the splint is made (Fig. 1), and be made to cover the uncut part of the splint itself, and give a sterile surrounding to the operation field. The splint is then put on, permitted to set with the foot in the corrected position, the dorsal part of the splint cut away (Fig. 2), and the kerchiefs folded back (Fig. 3) and fastened by a sterile bandage (Fig. 4). A quadrilateral flap is now made, its at-

Fig. 2. A quadrilateral opening in the dorsum of the splint, exposing the gauze underneath.

Fig. 3. The kerchiefs folded back, exposing the skin beneath.

Fig. 4. The kerchiefs bandaged down by a sterile bandage, giving the operation field a sterile environment. Shape and size of the flap outlined on the skin in ink.

tached base at the tarso-metatarsal line, its sides at the inner side of the first and the outer side of the fifth metatarsal bone, and its free margin at the metatarso-phalangeal line. (Fig. 4 shows the position of the flap incisions.) The turning back of the flap exposes all the toe extensor tendons as they traverse the metatarsus. The extensor proprius hallucis tendon is now picked up, cut just behind the head of the first metatarsal bone and turned back from its sheath. The periosteum thus exposed is incised along the dorsum of the bone and separated toward either side. Two chromicized catgut sutures, each having a long, strong, straight Hagadorn needle on either end, are passed transversely through the tendon, nearer its dorsal than its plantar surface, the distal sutures about 1 cm. from the cut end and the proximal about the same distance behind this. One of these needles is passed on either side of the bone, between it and the reflected flap of the periosteum, and then on through the sole of the foot and the plantar part of splint. Now, when these two sutures are pulled taut and tied on the sole of the splint the tendon is held tight to the denuded bone, and is partly covered by the flaps of periosteum (Fig. 5). The value of the splint is now seen, for this toe may be disregarded during the operation on the others. The other tendons are treated in an exactly similar fashion, except that it seems that one suture may be enough for a tendon instead of two. After the last tendon is sutured, the flap is replaced and stitched by a subcuticular suture, a proper dressing is put on and another plaster of

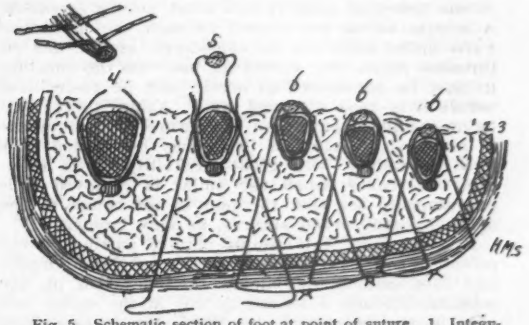

Fig. 5. Schematic section of foot at point of suture. 1. Integument. 2. Layer of gauze. 3. Plaster of Paris splint. 4. Sutures through the tendon, and the bone and periosteum prepared for the suture. 5. The suture in the tendon and through the foot and splint, but not pulled taut and tied. 6. The tendons fastened in their subperiosteal location, and the sutures tied on the outside of the splint.

Paris bandage is put about it all to retain the dressings and strengthen the splint. Unless there is some reason for doing otherwise, the dressing and foot are left undisturbed for six to eight weeks. To get the best functional result, the foot should be in a position of slight dorsal flexion (extension) at the ankle joint.

Now in all the cases in which I have done this, eight feet in six children, the immediate result has been what was intended. The effort to lift the front of the foot really did lift it, and was not wasted in hyperextension of the toes. But in two cases it has seemed that the big toe tendons have become loosened from their insertions on the metatarsal bones, have reunited to their distal ends and resumed their original insertions; and in one case this was followed by a partial relapse into the deformed position. To prevent this I have, in later operations, cut off as much as possible of the distal end of the tendon, but it may be found necessary to use a more permanent suture material, such as silk, which can be buried in the foot and left there, instead of the chromicized catgut. If that is done it should be passed around the bone by an aneurism needle or a Durham or Goodwillie needle, so as to make its location definite. This plan I have not yet tried. It might, again, be possible to use silkworm gut sutures in the manner described for the catgut, and to slip them from their places in the tissues at the end of the time of splint restraint. This also I have not tried.

The correction of a deformed position before an operation on tendons to maintain this correction, is, of course, a usual matter; but the application of a splint to maintain the correction easily and surely during the tendon transference is an addition to the technic of not indefinite value.

In talipes calcaneus, when it is intended to transplant the tendons of some of the posterior tibial group of muscles to insertions into the os calcis, to take the place of the sural muscles, it is advisable to correct the position of the os calcis definitely and to let this be the limit of the first operation. At a later time, with the foot still in the retentive splint, the operation on the tendons can be done with a quiet certainty which is foreign to the operation where an assistant's hands must be trusted to maintain the new position during the suturing of the tendons and of the incisions, and while the splint is being put on and is setting.

If the tendon operation is done at the same time as the corrective procedure, it then will be possible to practice the suture which passes through the foot and splint and ties on the outside of the latter, for the needle passes with but little difficulty through the freshly set plaster of Paris bandage. But there is one practical point which must not be forgotten. A needle which has passed through the plaster of Paris splint must not be considered aseptic and rethreaded on another suture for use. On the contrary it must be considered as septic, and be resterilized before it is used a second time. Again, there must be no to-and-fro pulling of the sutures after they are in place, else plaster of Paris may be carried back into the wound, with great possibility of its infection. Moreover, when the splint is removed it is necessary to see that the foot is not bound to the splint by unabsorbed sutures, as may happen.

I have applied this simple plan of putting on the retentive splint after the correction of the deformity and then immediately doing the operation on the tendons, through a fenestrum cut in the splint, not only in the operations described, the transposition of all the toe extensor tendons to metatarsal insertions, but also in the transposition of posterior tibial and peroneal tendons to os calcis insertions, and in transposing the extensor proprius hallucis to an insertion on the cuboid or fifth metatarsal to take the place of paralyzed peroneals, and once in an operation on an extensor tendon of a finger, in which the little middle slip of the extensor communis digitorum, which is inserted into the base of the second phalanx, had been cut by a punctured wound. In this instance the chromicized gut suture pierced the tendinous slip transversely, then was led by fine needles through two holes which had been bored in the bone at the proper places and then passed through the integument of the flexor aspect of the finger, on either side of the flexor tendons, then on through the splint where the two ends were tied. The union of the tendon to the bone, in this instance, was most satisfactory. In giving tendons new insertions on the os calcis it is, also, necessary to drill holes through the bone for the passage of the sutures to the sole.

As regards the results of the operations on the cases of hollow clawfoot, one patient in whom the implantation of the tendon was not secure, may be counted a failure in one foot, and a partial success in the other. All of the other cases have been satisfactory so long as I have been able to follow them, but that has been only for a comparatively few months, and this report can be considered as only suggestive and provisional.

P. S.—Another patient operated upon since the writing of this paper, demonstrates perfectly the transference of the action of the long toe extensors to the metatarsus.

A CASE OF TRIGEMINAL NEURALGIA, PRESENTING SOME UNUSUAL FEATURES, TREATED BY INTRANEURAL INJECTIONS OF OSMIC ACID.*

By T. C. McCLEAVE, M. D., Berkeley.

IN 1899, W. H. Bennett, of London, advocated the intraneural injection of osmic acid for the relief of trigeminal and other neuralgias, and reported (1) ten cases cured by this method. In 1903, Dr. John B. Murphy reported (2) a case apparently cured, and has since so treated six other patients, all of whom have remained free from pain. These cases were all severe in type, and had resisted all previous attempts at cure, several patients having undergone various operations without benefit.

The operation consists in the exposure of the affected branches of the nerve at the foramina of exit, the supra-orbital, by a small incision along the lower border of the eyebrow; the infraorbital and mental by small skin incisions or through the mouth. The former method seems preferable, as the incisions may be small and can readily follow lines of the face, thus leaving inconspicuous scars. The nerves are elevated by blunt hooks, and a few drops of freshly made 1.5% solution of osmic acid injected into the nerve at several points, and also into the space about the nerve as it lies in its bony canal, using a hypodermic syringe with a fine needle. The operation is followed immediately by partial relief from pain, which becomes complete in the course of some days, indicating that the acid induces certain degenerative changes in the nerve, the exact nature of which is not at present known. There has been no recurrence of the pain in any of the previously reported cases. My own case is as follows:

Mrs. B., 56 years old, gives no history of constitutional or other diseases which might be of significance in this connection. In December, 1891, she sustained a fracture of the leg in an accident, but no other known injury. Two months later she had a severe attack of right-sided trifacial neuralgia, which lasted three or four weeks, and finally subsided under treatment, not recurring until more than a year later, in June, 1893. From this time on the attacks recurred at irregular intervals. Five or six years later, patient began to notice pain on left side of face as well as on right, and this has since continued, never becoming so severe on the left, however; and a peculiar fact has been noted that at the period of greatest intensity of the pain on either side, it was very much lessened on the opposite side, the paroxysms never involving both sides at the same time. Of late years the paroxysmal attacks have become progressively more severe, and even in the intervals there has not been complete freedom from pain, the patient living in continuous dread of precipitating an attack by the slightest irritation of the nerves in chewing, talking, by draughts of cold air, etc., to the very great detriment of her nutrition and general health. All three divisions of the nerves were involved. During these years she has been treated in all sorts of ways by numerous physicians, but their attempts to relieve her have alike resulted in failure.

In September and October, 1901, the late Dr. Brigham did two operations on Mrs. B. in which he is said to have resected portions of the supra and infraorbital branches, and of the inferior dental, but the pain returned within a brief time with increased severity. The patient was then removed to St. Luke's Hospital, San Francisco, in January, 1902, where Dr. Brigham contemplated some further operative measure, but gave up the idea at the instance of Dr. Moffitt, who saw the patient at this time, and advised that any further operation would be useless, as he considered the pain of spinal origin, basing his opinion upon its bilateral occurrence and upon certain disturbances of the reflexes, etc., which he observed. Treatment with large doses of quinin and potassium iodid then seemed to give some promise of relief, but only for about three weeks. A change of climate was then tried, the patient going to Stockton, where some temporary benefit seemed to be derived from the warm weather and the ministrations of an osteopath, but the pain soon returned.

She came under my care December 20th, 1903. Her condition at this time was distressing in the extreme. She was weak and emaciated from inability to eat and loss of sleep, and tortured by pain so severe as to require almost lethal doses of morphin to control it. I advised the osmic acid treatment, and operated January 13, 1904, on the right side, exposing the nerves through small skin incisions, and injecting the acid as directed by Bennett.

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April, 1904.

The nerves picked up above and below the eye appeared in every respect normal, and were easily injected, but the nerve at the mental foramen consisted of simply a few filaments of nerve tissue, and no intraneural injection was possible. The needle was inserted into the bony canal, however, and the acid injected therein. The operation was followed by almost immediate and complete anesthesia of the area supplied by the supra-orbital branch, but prompt return of pain in the other branches.

Second operation, January 29th, 1904. Pain very severe before anesthesia. Incision 1¾ inches long along the lower border of the orbit, and the cheek retracted so as to freely expose the surface of the bone below. It was then seen that the nerve injected at the first operation was but one of a number emerging through a bony slit about ⅜ of an inch long and uniting to form a tortuous mass the size of a small marble from which numerous larger and smaller nerves radiated downward into the tissues of the cheek. So far as possible all of the nerves, both proximal and distal, to the neuroma mass were drawn out, injected with acid, and severed, the mass being thus removed. The inferior dental nerve was then attacked by an incision over the ramus of the jaw opposite the dental foramen, exposing the bone, which was penetrated by means of a small trephine and the nerve picked up before entering the foramen. Here were found a large nerve about the size of a slate pencil, and several smaller twigs, one probably the mylo-hyoid branch. These were injected proximally and distally, and about ¾ of an inch of the nerve trunks excised. The wounds were closed with horsehair sutures, and primary union occurred in spite of the unavoidable contact of the acid with the tissues, which results in more or less charring of the cut surfaces. The patient awoke from the anesthetic free from the right-sided neuralgia, and has continued so.

It may be said that the resection of the nerves in the second operation interferes to an extent with the clear demonstration of the efficacy of the osmic acid treatment as applied in this case, but it will be remembered that the supra-orbital branch received no treatment but the acid injection, and it has remained as painless as the nerves which were both cut and injected. It is also important to note that my operations, which so far as I can learn were practically the same as those done by Dr. Brigham, plus the injection of the acid, have been followed by a much more satisfactory result.

As to the spinal origin of the pain in this case, I cannot say. If it be due to irritation in certain areas of the cord, with reference of the painful sensations peripherally, just as pain appears to be felt in an amputated limb, for instance, I am at a loss to understand how any operation on the peripheral nerves can result in any but the most transient relief, and especially how any particular method of interrupting the continuity of the nerves can be more efficacious than any other method, since the pain is supposed to be independent of the condition of the nerves; yet in my case the results of the two series of operations by Dr. Brigham and myself have differed greatly. Moreover, the operations disclosed sufficient local disease to account for the neuralgia on the right side. This, of course, does not exclude the spinal element, however, and the pain may recur as prophesied; but even so, to declare the operation on such a patient useless would be a mistake, for in this instance, at least, it has been amply justified by the relief afforded, even if this shall prove to be of but a few months' duration, and by the already very great improvement in the patient's general condition, both physical and mental.

I have, therefore, desired to take this opportunity to call to your attention a method of treatment of this terrible condition which is very promising, simple and safe, but which, judging from the paucity of reports regarding its use, seems as yet to have failed of the recognition it may prove to deserve.

Aug. 25, 1904.—The condition of this patient at present, seven months after the operation, is as follows: There has been no recurrence of the right-sided neuralgia, though there is some soreness in the cheek and occasional twinges as though some small nerve had escaped attention at the time of the operation. There has been a decided diminution in severity of the left-sided neuralgia. The patient has gained in weight some twenty-odd pounds, eats well and sleeps well, which was impossible before, and has been enabled to resume the family and social life, from which she was debarred for a long time previous to the operation.

I would offer the suggestion that the osmic acid should be tried in every case of trigeminal neuralgia, before resorting to any nerve cutting or other more radical operation.

(1) W. H. Bennett, *London Lancet*, 1899.
(2) John B. Murphy, *Journal A. M. A.*, 1903.

SOME REMARKS ON HYSTERECTOMY, WITH SUMMARY REPORT OF ONE HUNDRED CASES.*

By W. W. BECKETT, M. D., Los Angeles.

HYSTERECTOMY is indicated on fibro-cysts, in all edematous tumors when accompanied by watery discharge, in large tumors causing symptoms, in all fibroids except those suitable for myomectomy and small ones which cause no inconvenience and after the menopause, in malignant disease of the uterus, uterine rupture during labor, chronic endometritis with pus-tubes, in some cases of procedentia, in puerpural sepsis, and in certain other rare conditions. The vaginal route is preferred in all cases where the uterus is not large, and in malignant cases where the disease has not advanced beyond the cervix. Clamps are only to be used when it is necessary to keep as far away from the uterus as possible to avoid diseased tissue.

After separating the bladder and rectum from the uterus, the tissues on either side of the cervix are ligated and cut away to a level with the internal os. A wedge-shaped section of the uterus, including the cervix and extending to the fundus, is then removed. This leaves but a small portion of the uterus on either side, and allows ample room to complete the operation. The operation is completed by bringing the stumps of the broad ligaments down into the vagina and closing the intervening space with interrupted catgut sutures. Catgut is used throughout the operation. Any bleeding points that remain are caught with hemostatic forceps, which are removed in about 24 hours.

When clamps are used, a sterile gauze packing is placed well above the end of the clamps, lightly filling the intervening space and the vagina. The clamps are removed in from 24 to 48 hours. The gauze is not disturbed until the fifth day, unless there are indications. It is all removed by the seventh day.

The advantages of the vaginal route are: A smaller opening of the peritoneal cavity, greater rapidity of operation, less shock, more rapid convalescence, avoidance of frequent dressing of the abdominal wound, less danger of infecting the peritoneal cavity and a lessened mortality.

Supra-vaginal hysterectomy should be done for large non-malignant tumors. The uterine and ovarian arteries are secured on both sides with catgut. The anterior and posterior flaps are united with catgut Lambert sutures, closing over the stump of the cervix and leaving no raw surface exposed. The intervening dead space between the flaps is either drained for 24 hours with gauze covered with rubber tissue, or not drained at all. Total hysterectomy should be done in all malignant cases.

There is, as yet, no reliable indication for hysterectomy in acute puerpural infection. Prompt intra-uterine treatment, at the proper time, will cure almost every case. But in a few exceptional cases, in which these measures prove inadequate, hysterectomy should be performed. Cases most favorable for this treatment are those in which the infection is localized in the uterus and adnexa. Before operating it is well to determine the condition of the liver and

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

kidneys. Many die of septic nephritis and purulent thrombosis. In case of pus-tubes, the uterus is always diseased, and should be removed.

The following is a summary of 100 patients operated upon by me. Of this number, 46 were for fibroid growths, 18 for malignant disease, 27 for chronic endometritis with diseased tubes, 8 for procedentia, 1 for imperforate os. The youngest patient was 16 years old, the oldest 71 years.

Vaginal hysterectomy was performed 72 times; supra-pubic, 28 times.

Four patients died. One from pulmonary embolism, the third day after operation; one from malignant stricture of the bowel, seven days after operation; one from surgical shock, and one from exhaustion.

Of the malignant cases, six have recurred; the earliest, one month after operation; the latest, one year after operation.

In three cases there was alarming post-operative hemorrhage, one occurring six days after operation, one eight and one nine days. In one case clamps only were used; in one case, ligatures only, and in the other case both clamps and ligatures were used. In each case clamps were reapplied for 24 hours. All recovered without further interruption. Whenever possible, one ovary was left, and in some cases both.

In the case of the sixteen-year-old girl, with the imperforate os, the uterus was dilated to the size of a seven months' pregnancy and the cavity filled with retained menstrual fluid. The right ovary was cystic, and about the size of a small orange. In the left side there was an ovarian cyst the size of a fetal head. The left fallopian tube was 12 inches long, and distended with menstrual fluid.

In three cases dermoid tumors complicated the operation.

When hysterectomy was done for procedentia, anterior and posterior colporrhapy was also performed.

One patient, after a supravaginal hysterectomy, had a slight irregular menstruation for nearly two years following the operation. In this case only one ovary was removed.

DISCUSSION.

Dr. W. F. B. Wakefield, San Francisco.—The doctor's paper is so full of points that it is very difficult to know just where to start to discuss. It is impossible to take up all the points. In the first place, he speaks of vaginal hysterectomy as being applicable to cases of cancer of the cervix where malignant degeneration has not gone beyond the cervix. One cannot tell when it is still confined to the cervical tissue. In cases of cancer of the cervix, in probably 90% the upper uterine tissues are undoubtedly affected, and that without any demonstrable condition being present. You cannot palpate malignancy of the endometrium. The glands up along the ileac vessels will be very much involved and yet you cannot feel a particle of thickening. I studied in Vienna 100 or 150 specimens in cases where apparently the parametrium was uninvolved and the glands uninvolved. I believe in justice to women who come to us with cancer of the cervix: there is no operation that can guarantee cure for cancer of the cervix. A very radical operation with the removal of everything, analogous to operation for cancer of the breast, would give you but a fair chance of recovery from the shock of the operation. But if we are going to suggest a vaginal hysterectomy, we ought to say that the only thing we can promise is that we cure 5% of the patients who come to us, and prolong life in 10 or 15%. You say that the statistics show 15 to 50% of cures, but those statistics, I am sure, are absolutely incorrect. Consider Johns Hopkins. There is no institution where better work is being done than there. They claim to cure 10% of the operable cases. Making choice between the operable and inoperable, they probably cure 5%, but no more. The case they deem to be operable they give the operation the benefit of the doubt. I feel very seriously on this matter. We ought to be very careful in the attitude we take. We certainly ought to tell the patients the small percentage that recover. Cases are constantly recurring even 10 years after operation. If we follow them that long we will be doing well if we cure 5%.

Dr. A. W. Morton, San Francisco.—I would like to say a few words as to whether to take the abdominal or the vaginal route in these cases. I see that the doctor prefers the vaginal route. In my mind the vaginal route has some good points. If you are using it for drainage, I think it is an excellent thing for temporary use. But if you are going to do a hysterectomy, there are too many complications that are likely to arise. I think it is far better to make the abdominal route, and see what you are doing. Only two weeks ago I was doing a vaginal hysterectomy, and expected to take out a pus tube on the left side; the first thing I knew my finger was in a cancer of the bowel that was involved in the tube. It would have been better to have opened the abdomen and made an anastomosis of the intestine. The history in this case did not justify the diagnosis of carcinoma. A man who does vaginal work is going to have fistulas of the bowel. It is only a year ago that a patient came to me with a fistula of the bladder following a vaginal hysterectomy. A few years ago, before I did much work, I assisted in the east a man who did vaginal work. I dressed his patients, and it was not unusual to find fecal fistulæ. It is simply because you are unable to see the field where you are working. As to the advisability of doing hysterectomy for carcinoma of the uterus, many of the best men advise it. I saw a report by Dr. MacMonagle of 300 hysterectomies with recovery, following them for 10 years; 1 or 2%. With such statistics as that I cannot promise, when I do a hysterectomy, any cure.

Dr. Beckett, Los Angeles.—With reference to cancer of the cervix, I certainly agree with Dr. Wakefield. In most of my cases there has not been time to know whether there has been recurrence or not. I always tell the patient's' friends that it is only a palliative operation. The reason why I suggest vaginal hysterectomy is because it is a safe one. If we are doing a palliative operation, we want a safe one. Dissect out all of the glands and tissue, and a great many of the patients will die. Most of our American women will not submit to such an operation. The greatest trouble is to get these patients when we have only a small portion of the cervix involved. I have one woman now who was operated upon five years ago. I told her that it would return in six months, and regretted very much to do the operation at all. She has been spared to her family now nearly five years, and there is no return as yet. That operation is justifiable. I went through the vagina and took out everything as far as I could, and in six weeks she was quite well. I agree that we ought to explain these things to our patients or their friends. In reference to the vaginal fistulæ, I think they were produced by nicking the intestine and by allowing the clamp to extend up into the intestine.

"In the hope that the mission of these pamphlets may fulfill all that its authors and originators intended, and carry comfort and consolation into the homes of the afflicted, we dedicate this to the children of San Francisco—her **future** sons and daughters." (Apparently this is a delicate compliment to the unborn.)—**Health Hints for the Household; S. F. Board of Health.**

A verdict of $100 was sustained by the Supreme Court of New York for an injury described as "a black eye."—L. Sexton.

SOME WRINKLES WITH FEHLING'S TEST FOR GLUCOSE.

By WILLIAM C. RILEY, M. D., San Francisco.

THESE remarks were mainly inspired by seeing an article a little while ago in one of the journals in which Fehling's test, the test of the multitude for glucose, was quite roughly handled, nor could any good be found in it. It was difficult to make, difficult to keep, annoying to use—just think of the annoyance of mixing two solutions together!—indeed, the only modicum of praise it got was being a good "negative" test. Damned with faint praise, could anything be worse? I purpose to show in what follows that these strictures are in a measure unjustifiable, and that when used in a proper manner, Fehling's solution is a good positive test for glucose in urine, or in anything else, for that matter.

Whatever may be said and written about tests for glucose in urine, and the fallacies and failures of Fehling's test therefor, rest assured that the average practitioner, and sometimes more than the average, usually relies upon it; and for many reasons. It is a reliable negative test used in any old way; this often suffices. It is convenient, easily prepared or gotten from almost any drug store, made in a fairly reliable way. If made of purified crystals of copper sulphate, or even from a good average commercial article, one need only weigh out the requisite amount on even the ordinary prescription balance, and thereby get a pretty accurate solution for quantitative work. At all events, the limit of error of a solution prepared in this manner is usually well within the experimental error of determination, except in a skilled chemist's hands—and for the edification of skilled chemists I am not writing. This advantage of weighing out one salt renders a standardization by means of sucrose into glucose unnecessary unless, of course, very accurate work is to be done, as in some problem investigation or commercial analyses.

Unfortunately Fehling's solution, as ordinarily used for qualitative work, is not in many instances a reliable test; and it is to clear up this difficulty, remove doubts, save time, trouble and annoyance to the general practitioner that I propose a more general use of Fehling's solution in the cold—that's the secret of the whole thing, and it does the work; which is all one ought to expect. One should start out with correct premises, so I give the formulæ of the solutions I have used for many years, and not found wanting; a moderate amount may be mixed ready for use, and kept for perhaps three or four weeks without deterioration.

FOR THE COPPER SOLUTION, A.

Pure sulphuric acid	1.00 gram
Cryst. Copper Sulphate ($CuSO_4 + 5H_2O$)	34.64 "
Water enough to make	500.00 cc

FOR THE ALKALINE SOLUTION, B. (This is where formulæ differ.)

Sodic hydrate sticks, (reasonably pure)	60.00 grams
Sodic-potassic tartrate (recrystalized is best)	175.00 "
Water enough to make	500.00 cc

Equal parts of A and B make Fehling's test solution.

In ordinary testing with this solution a small amount should be boiled and allowed to cool partially before the urine is added, say to a temperature of 180 to 200 degrees Fahrenheit. Then the mixture with urine should not be boiled. It is unnecessary and misleading to boil. If the glucose is there it will soon show by the characteristic yellow or reddish yellow precipitate—seldom red. This alone will give negative results in glucose-free urines that ordinarily would show some reaction when boiled. Better yet, and best, especially where the hot Fehling's has given a slight or an atypical reaction (muddy yellow solution, blue color partially discharged, or other anomalous proceeding), take equal parts of the suspected fluid and Fehling's, cold, mix thoroughly and set aside. Any urine containing one-twentieth of one per cent or more (0.05 per cent) glucose will react, giving a yellow precipitate in the course of twenty-four hours or less, according to the amount of glucose present and the room temperature; I am speaking of an average room temperature of 60 to 65 degrees Fahrenheit. I plead for a more extended use of this simple expedient. Time is not usually precious in these cases. Freedom from doubt is.

I am quite well aware that it may be said that we have the phenylhydrazin test and others for clearing up our doubts. It is true, and practically the phenylhydrazin test is the one oftenest resorted to. In answer to this objection, permit me to remind those who have had experience with phenylhydrazin that it is not all plain sailing, particularly where the percentage of glucose is small. It requires skill and knack and a large amount of practice to get reliable results. Phenylhydrazin hydrochlorate, at least in many samples of Merck's which I have had, has not been particularly good in keeping qualities. The general practitioner is seldom going to use it even if he has it. I am not speaking disparagingly of phenylhydrazin; it is invaluable, accurate, definite and distinguishing (the last by the aid of the microscope and melting point of crystals obtained); I simply do not believe it suitable for the average man.

As regards the limitations of cold Fehling's solution, there are many urines containing neither sugar, glucose nor the ordinary reducing drugs as salicylates, etc., which, with Fehling's as ordinarily used, will give either a typical reaction or one in which we are in doubt; a sluggish reaction, a partial decolorization of the solution and even a slight precipitate of cuprous oxide. This class of urines, I can positively assert, will not in twenty-four hours give a yellow precipitate with equal parts of Fehling's test solution used cold. Anything less or other than a distinct yellow precipitate is not to be counted. These urines usually give a positive reaction when heated with Fehling's solution, from the presence of alloxure bases in excess. Kreatin and kreatinin are favorites for doubtful reactions. How much farther can we go with other sugars or commonly reducing drugs? In answer, I append a little tabular statement giving the commonly occurring reducing agents. Any one can verify this table very easily, as the time consumed in making the tests is practically nil. As is seen, levulose acts exactly similar to dextrose. Any person having levulose in the urine is to all intents and purposes a glycosuric patient. About glycuronic acid: Some people claim this as the chief offender. It is largely so when hot Fehling's is used. It offends no longer with cold; *i. e.*, in reasonable amounts such as will react positively with hot Fehling's always.

I promised you some wrinkles with Fehling's; here is another, and from the chemical standpoint more important: It is indeed a time saver. No originality at all is claimed, only again a plea for a more extended use of it. Perhaps the reason this method is so little used—many chemists seem to be entirely ignorant of it—is because when first reported it was unfortunately reported incorrectly, and gave, when used, very inaccurate results. In 1892, at a meeting of the British Pharmaceutical Conference in Edinburgh, Mr. A. W. Garrard, F. R. S., read a paper on the subject, but had not used his method properly—a mere matter of boiling made the difference between very good and very bad results. The writer soon found this out for himself, and adopted it, and has had no cause for regret since. It is for the quantitative determination of glucose (and, of course, of other reducing agents, if they be present). Take Fehling's

Substance added to Urine. 1030 sp. gr.; acid; no alb.; no sugar.	Grains to 1 ounce	Hours let remain.	A Reaction cold Fehling E. 9 parts	B Reaction hot Fehling's without standing	C Reaction on heating A after standing the specified time	Remarks
Sodii Salicylate	5	36	None	Marked	Slight	
Urine of patient taking 15 grains Soda Salicylate every 4 hours. S. G. 1030; acid; no alb.; no sugar	.....	24	Greenish col. to sol.; no yellow p p t.	All blue color discharged; muddy yellow	Same as B, only have to boil longer	
Urine 0.025% alb. (Esbach). S. G. 1035; acid; urates dep.; no casts; Epithelium, much.	⅛	24	Greenish col. to sol.; no p p t.	M'rk'd yellow discol.; all blue discharged	Same as B	Probably other urinary constituents besides albumin augment this reaction.
Urine, alb., trace; pus, urates, oxalates, yeast cells. S. G. 1032; color dark	.....	24	None	Typical	Typical	Originally a ½% glucose urine; fermented when obtained; phenylhydrazin HCl test fails to give positive reaction.
Urine, 1035 S. G.; very acid; high color; urates dep.; no alb.; no sugar	.....	24	None	Yellowmuddy color	Same as B	One of those doubtful urines, just where confusion arises with Fehling's.
Acid Oxalic	5	36	None	None	None	
Maltine	10	1	Typical	Typical	Typical	Reaction in cold very prompt.
Dextrose (glucose)	¼	24	Typical	Typical	Typical	0.050 % solution.
Formalin (40% commercial)	10	24	None	Typical	Typical	
Acetone	10	24	None	None	None	
Manna	5	24	None	Sluggish but typical	None	
Lactose	5	24	None	Typical	Typical	(Milk sugar.)
Alcohol	20	24	None	None	None	
Chloroform, saturated sol. in Urine	.....	24	None	Typical	Slight but typical	
Chloral Hydrate	4	24	Green color to solution	Typical	Muddy yellow color	Chloral 4 grs. to 1 oz. and cold Fehling equal parts let stand 36 hours and then heated fail to give positive reaction.
Levulose	5	24	Typical	Typical	Typical	
Maltose	½	12	Typical	Typical		1% maltose. If Fehling, say 2 cc be heated to boil, taken from flame and 15 drops added and no further heating, reaction very sluggish, beginning in 3–4 min.
Di Acetic Acid	5	24	None	None	None	
Saccharine	3	24	None	None	None	

Column "C" is inserted to show that many reducing agents, in prolonged contact with a strongly alkaline solution containing an oxidizing agent, are more or less decomposed without precipitation of suboxides, thus offering a possible explanation of the efficiency of the method of of "Cold Fehling's"

solution (mixed, copper and alkali) 10 cc., dilute with a little water, heat to boiling and add, while boiling, a solution of potassium cyanide (KCN). I use 20 per cent solution or thereabouts. Add drop by drop until the solution is just decolorized while boiling. To this mixture add now 10 cc. Fehling's solution, boil, and while boiling add your glucose solution or urine, best not over 1 per cent solution—add till just decolorized again—(with dark urines the color becomes greenish yellow). This marks the end reaction. Read off on your burette and estimate on the basis of 10 cc. Fehling's only (equals 0.050 grams glucose).

By this method we avoid the tedious waiting for the solution to clear of precipitated cuprous oxide in order to see if the color is all gone; in some estimates with Fehling as usually used it is almost impossible to tell this, thus avoiding two sources of error, the doubt as regards all color gone, and the well-known fact that an excess of hot Fehling's kept in prolonged contact with a deficiency of glucose is reduced more and more as time goes on.

To avoid the troublesome settling of the cuprous oxide in the ordinary analytical operation some one has proposed the addition of a solution of calcic chloride, in small amounts, the lime precipitate carrying down the more flocculent copper oxide. From personal experience I know that the lime precipitate also carries something else with it not so desirable, viz., copper from the solution; hence your glucose percentage reads higher than it should. Various other expedients are adopted, all open to the same objections, time and prolonged contact of Fehling's solution in excess. In fact, if one aims to get accurate results with Fehling's as ordinarily used, he must first make a preliminary determination to know about where he stands. This is obviated by Garrard's method.

I find it convenient to have the KCN in sticks in a tightly closed wide-mouthed bottle. I break off a small piece and pour boiling water over it when I desire to make only an occasional determination, because KCN does not keep well in solution. Ammonia forms and vitiates the results. The whole determination can be carried out in much less time than it takes to tell of it.

In closing, I should like to call attention to a grave error (probably typographical) in one of our most widely used guides to laboratory work, "Clinical Diagnosis," by Simon. This error is contained not only in the earlier editions, but is industriously propagated in later editions; viz., 5th edition 1904, when, in speaking of the standardization of Fehling's by means of sucrose converted into glucose, directions are given to keep at the boiling point for one hour the solution of sugar (cane), with the addition of 22 drops of 0.1 per cent solution of sulphuric acid. Probably a 10 per cent solution of H_2SO_4 is meant, which is not too much. Unless acid to about that amount is added much sucrose remains unconverted at the end of an hour at 100 degrees Centigrade.

The Obstetric Bag.—Dr. John R. Hamilton writes to the *British Medical Journal:* "I believe that the bag of to-day is dangerous; but the danger lies in its size. It can hold too many instruments of offense—more potent to damage than the most subtle germ, and at the same time being the germ's true friend. I would recommend all young practitioners to procure a very small leather bag, if they desire to be successful obstetricians. They will find in the course of twenty-five years few mishaps if they keep their hands clean, and do not fuss too much.".

MYOCARDITIS, WITH SPECIAL REFERENCE TO DISORDERED METABOLISM.*

By DR. W. W. KERR, San Francisco.

Members of the Alumni Association—Ladies and Gentlemen: When your executive committee asked me to deliver the first Toland Lecture, they modified this request by suggesting that the topic should be something clinical, about the heart. The choice of a subject has thus been rendered less difficult, and the responsibility for failure consequent upon such a selection was divided between us.

The subsequent remarks upon treatment of the myocardium do not constitute even an epitome of the whole subject; our endeavor is simply to direct attention to some features in the treatment of heart disease, which seem to be very frequently overlooked among the host of therapeutic measures directed toward the relief of cardiac disturbance. Nothing new is offered; we only look back over the practice of nearly a quarter of a century and see what lessons have been learned; or compare the past with the present and ask ourselves whether in the adoption of new remedies and new methods we have not occasionally discarded older ones of greater value; whether in each and every case the change has meant actual progress.

The heart is the most abused organ in the human body, even more so than the stomach, because when the latter is overworked it rebels and has its own vigorous methods of enforcing its demands for a period of absolute rest; but when the overworking, overtaxed heart, by an attack of palpitation or other form of cardiac distress, advances its plea for a diminution in the strain to which it is subjected, the response only too often comes as a whip of stimulation in the form of alcohol, digitalis, ammonia or some similar agent. The mere allaying of a symptom such as palpitation does not demonstrate that the correct treatment has been used, because it frequently happens that a stimulant will steady the heart's action when the condition of the cardiac muscle demands sedatives and rest; but the promptness of response may deceive one as to the gravity of the situation, and consequently the urging process goes on until the over-driven heart begins to stagger under its efforts, and even then the attendant may fail to recognize the fact that injudicious treatment has simply hastened the development of irreparable myocardial changes.

There is a fascination about the mechanics of the heart that tempts one to regard cardiac disease simply as an indication of a disordered machine without taking into account the condition of the tissues which compose the organ; all symptoms seem to call so loudly for increased or diminished action that there is a liability of adopting a line of treatment which will compel the heart to the performance of its functions without our full cognizance of the condition of the viscus, and it may be without making an attempt to discover or remove the cause of the disturbance; we may be so interested in our endeavors to obtain mechanical effects that we fail to watch the condition of the machine. Much injury may be done by acting upon the idea that a weak heart always demands a cardiac stimulant; in fact, better and more permanent results can be obtained by bringing the demands of the body within the capabilities of the heart rather than by compelling the heart to rise to the demands of the body. Frequently there are patients about 50 years of age suffering from mild cardiac disturbance who are relieved from time to time by means of digitalis or strophanthus, but unfortunately the treatment is allowed to stop at this point, with the result that the distress is allayed only to return, and to return each time after a shorter interval. These are generally cases of incipient muscular change, and it is not improbable that if some effort were made to discover and eliminate the cause of injury to this cardiac muscle the degenerative process might be retarded or even arrested. In thus protesting against the indiscriminate use of cardiac stimulants, and especially of digitalis, I do not wish to be understood as maintaining that digitalis is destitute of nutritive influence; on the contrary the improved circulation through the cardiac muscle must be of great value in restoring tone to the muscular fibres; but there are changes due to constitutional conditions when the heart failure is the result of malnutrition, or of some toxin or product of perverted metabolism circulating in the blood, and the treatment of such cases by digitalis alone is certainly inadequate; in fact, the use of this or any other cardiac stimulant may be positively injurious under such circumstances.

Errors in treatment are more frequently due to mistakes in diagnosis, so far as the detection of murmurs is concerned, than to a failure to appreciate or a neglect to ascertain the state of the cardiac muscle and the existence of conditions detrimental to it. An examination of the heart should be an attempt to ascertain at least four things: (1) the condition of the valvular orifices; (2) the condition of the valve segments; (3) the condition of the cardiac muscle; (4) the causes of the cardiac disturbance. Unless fairly accurate information can be obtained on each of these points the treatment must be haphazard. It is this last point that is most frequently overlooked, and possibly the most important criticism of our treatment of myocardial lesions would be that we are somewhat inclined to neglect any attempt to discover the cause of the lesion, to discover whether it still exists, whether it can be removed, and thus by appropriate measures endeavor not only to restore the heart as much as possible, but also to prevent a renewal of the injurious influences or reduce them to a minimum. It must not be forgotten that many of the waste substances formed within the body are muscle poisons, and that a failure in elimination must therefore be associated with an amount of injury to the different muscles, varying in degree with the intensity and character of the toxic process. Thus in the ordinary bilious attack the patient complains of the muscular weariness in his limbs and the inability, or at least disinclination, to undertake anything requiring physical effort; but it is equally certain that the myocardium also suffers, for the disturbance is always associated with changes in the frequency, tone and rhythm of the pulse. Should this lithemic condition persist for a length of time it is to be expected that functional, and it may even be marked nutritive changes will result, especially when it is borne in mind that the contractile power of the heart is an inherent property of the cardiac muscle fibre, and consequently that anything which interferes with the nutrition of these fibres must disturb their functional activity. Furthermore, it is a well-established fact that the secretions of various glands have a distinct influence upon the heart and that changes in their structure are associated with grave cardiac disturbance; also, there is reason to believe that certain tumors in remote parts of the body tend to produce degenerative changes in the myocardium.

In the face of such facts it is very evident that the treatment of heart disease must have a wider scope than the use of remedies directed to the heart alone, and it is in illustration of this line of thought that the subsequent cases and criticisms are presented. They have been arranged in four groups: (1) Myocarditis due to defective metabolism as a result of disturbance of the alimentary system; (2) cases due to disorder of internal secretions and excretions; (3) cases where the myocardial disturbance is associated with the existence of a neoplasm in some other part of the body; (4) myocarditis as the result of specific

*The "Toland Memorial Lecture" delivered before the Alumni Association of the Medical Department of the University of California, May 16th and 17th, 1904.

infectious diseases. The first series of cases illustrates the influence of defective metabolism in producing cardiac disturbance or aggravating an existing lesion.

Case A—A professional gentleman, 50 years of age. Always had been a total abstainer from alcohol and tobacco; the only sickness he had had was typhoid fever, which antedated the very early sensations of cardiac discomfort by eight years. The patient never had been robust, but was of exceptionally active habits, and a great portion of his time was spent in the open air. He stated that for three years he had suffered with angina pains, and that during the last eight or nine months they were a daily occurrence. Trivial exertion, such as walking up a slight incline, would induce an attack, and frequently he had to sit down in a store or upon a doorstep until the pain passed away. Examination showed the pulse regular but slightly below the average strength, the radial arteries were healthy, and careful examination of the superficial vessels failed to show any signs of arterial degeneration. The heart was normal in size, and the only change that could be detected was a diminished intensity of the sounds, with an occasional systolic murmur in the mitral area. His family physician had examined the urine repeatedly, and always found it normal, with the exception of a frequent excess of amorphous urates. The patient had been unfortunate in his medical attendants, as his first physician left that part of the country, his successor died within a year, a local consultant shared the same fate, and the patient ultimately passed into the hands of a young physician, who was hampered by all the traditions in treatment handed down to him from his predecessors by the patient, without any explanation as to why such a line of life had been laid out; and the embarrassment was still further increased, as it was said to be the result of a consultation which was participated in by a well-known European specialist whom the patient had the opportunity of seeing upon two occasions. Under such circumstances the attending physician was loth to make any changes in the general treatment, although the diet puzzled him very much, at is was exceptionally abundant in the amount of nitrogeneous food allowed, while the urine indicated that nitrogeneous metabolism was imperfect. The close resemblance to a strict diabetic diet led me to ask the patient whether sugar had ever been found in his urine, and he replied that at the first consultation a trace was detected, and this diet was prescribed. A second examination, made forty-eight hours after the first, failed to discover any sugar, but nothing was said about the diet, and the patient not knowing why it was prescribed, persisted in its use for more than two years, under the belief that it was given for the relief of his cardiac pain. As his physician sickened and died a few days after the consultation above referred to, there was not anyone to correct the mistake.

We at once advised a mixed diet, in which the proteids were diminished, gave the patient a mercurial and saline every other day for three doses, then ordered him seven minims of wine of colchium, three times daily for about a month, and subsequently he took arsenic and strychnia. The patient began to improve after the first purgative, and at the end of one week could take more exercise than was possible at any time during the preceding two years. He still lives, and continues in the active pursuit of his profession; and although examination shows that his myocardium is weak, he very rarely shows any symptoms of angina, and never experiences the severe suffering which was a frequent occurrence four years ago. I feel sure that but for the unfortunate chain of events which led to his persistency in an injurious dietary for more than two years, his recovery would have been more complete.

Case B belongs to the same class. Briefly stated, the patient was a merchant, 56 years old, but prematurely gray, with well-marked arcus senilis and thickened arterial walls. I was called to see him on account of acute angina attacks, and failed to detect any change in the heart except the accentuated clanging sound in the aortic area (toomp) so frequently heard in cases where there is thickening and slight dilatation of the aorta. Notwithstanding the free use of nitro-glycerin and morphin, together with the administration of iodides and arsenic, the attacks increased both in severity and frequency until the patient dreaded to go to bed, because after a short sleep he would awaken in great pain and have to spend the remainder of the night sitting in his chair. This continued for more than two weeks, when, as he had been taking about a grain and a half of morphin daily, it was thought advisable to give him five grains of calomel, and, to the surprise of everyone, the pain ceased as soon as the calomel acted.

Case C—The third case of this class was a patient 52 years of age, a habitual drinker of whisky, who was suffering from a combination of hepatic cirrhosis and mitral incompetence. The mitral incompetence was of very old standing, but had not given any trouble until during the three years prior to my first visit. Upon examination the patient was found to have a considerable degree of ascites, together with so much dropsy of the lower limbs and feet that he had to wear felt slippers instead of his usual leather shoes. The heart was enlarged so that the apex beat was in the usual interspace but nearly one inch outside the nipple line, and a long systolic murmur could be easily detected in the mitral area. The pulse, moderately full, and although of less than normal tension, was still very much better than one would expect from the dropsical and dyspneic condition of the patient. The superficial abdominal veins were large and prominent, and although considerable ascites was present, the regularly enlarged and tender liver could be easily palpated when the patient was lying upon his left side. There was a small amount of albumen and a few hyaline casts in the urine. The patient informed me that the dropsical condition had existed for more than a year, during all of which time he had been under treatment, the chief remedies having been digitalis, strychnia and purgatives. The case seemed to be so well suited for digitalis that I prescribed it again, under the belief that the former preparations of the drug had not been reliable; but there was very little improvement at the end of two weeks, and consequently the pill of digitalis, squill and bluemass was substituted during one week without obtaining any better results. This experience, together with that of his former attendants, and the fact that the pulse tension, although below normal, was much better than one would expect in such a dropsical condition, suggested the idea that many of the symptoms which had been attributed to the heart were really due to the hepatic cirrhosis, and that the debilitated condition of the heart itself was probably due to the influence of toxins derived from this same source. All cardiac tonics were therefore abandoned, and the patient was given two grains of calomel three times daily for several days until there were signs of approaching ptyalism. Under this treatment the dropsy rapidly disappeared, chiefly by diuresis, the liver became smaller and lost its extreme tenderness, the area of cardiac dullness diminished, and the force of the cardiac contractions increased. Subsequently the patient was given one-fortieth of a grain of strychnia four times daily, and advised to take two grains of calomel once a week for one month. He is now in excellent condition, and has been able to work upon his ranch. The liver is still larger than normal, and the mitral murmur more pronounced than formerly, but this is what one would expect in a valvular murmur when the force of the myocardial contractions had been increased.

Case D—The fourth and last case of this series was noted in a man 50 years of age, who had incompetence of the mitral valve since boyhood, but muscular compensation had been perfect so that he could ride a bicycle or take part in active sports, such as lawn tennis, without suffering any inconvenience. There was a distinct history of gout in his family, although he never had suffered from it. About one year before I saw him he broke down in health, probably from worry and overwork, became very nervous, had frequent attacks of palpitation, lost consciousness on several occasions, and developed other symptoms which suggested the Adams Stokes syndrome, but he could not tell me whether they had been associated with bradycardia. When he walked three or four blocks he had to stop and rest, not on account of dyspnea, but rather because of a sensation which he said was "not pain, but a feeling as if he were tired in his chest just below the breast-bone." The right side of the heart was slightly enlarged, and there was a distinct mitral systolic murmur. The superficial arteries were thickened, but not to a great degree; the pulse was regular, of good tone and volume, and generally averaged from 65 to 70 beats per minute when the patient was at rest. The liver was enlarged. There was not anything abnormal in the urine. My first impression was that the distress was a form of angina due to the changed condition of the blood vessels, and consequently nitro-glycerin was prescribed in doses of 1-100 grain three times daily; but this only succeeded in giving the patient violent headaches, which persisted so long as the drug was continued. The next idea was that his exhausted nervous system was responsible for the trouble, and that all his symptoms might be due to neurasthenia; but rest and bromides failed to give any relief. Strophanthus relieved the attacks of palpitation, but did not improve his condition. It was then discovered that the patient had suffered from hemorrhoids since he was a very young man, and that they bled frequently; furthermore that the present sickness commenced from the time that the hemorrhoids had been removed by operative procedure. This coincidence, together with the gouty history, dietetic habits of the patient, and enlarged liver, awakened the suspicion that cardiac distress might be largely due to imperfect metabolism consequent upon a portal congestion which heretofore had obtained relief through the bleeding hemorrhoids, and that those products of this faulty metabolism were acting as toxins upon a circulatory apparatus which the patient's time of life, diathesis and pre-existing lesion had rendered more than usually vulnerable. One-quarter of a grain of mercury proto-iodid was prescribed three times daily with such satisfactory results that when the patient was seen forty-eight hours later he said, "Doctor, you have hit it this time." He improved rapidly, and frequently walked a distance of between three and five miles; but a change of residence removed him from my care, so that I am not able to furnish further information except the fact that three months ago he wrote to me saying that he was in fair health and able to attend to business.

These four cases are fair examples of what is sometimes described as gouty heart, not because the patient actually suffers from gout, but on account of the relation that is supposed to exist between it and lithemia; in the majority of the cases belonging to this class lithemia is a frequent symptom, but the connection between the two conditions must await a more perfect knowledge regarding the pathology of gout. All we are warranted in saying about lithemia is that it appears to be particularly associated with defective oxidation of nitrogenous food or tissues, and that this should not be attributed merely to functional inactivity of the liver, as was originally suggested, but may also have its origin in excess of nitrogenous food injested, or imperfect digestion in any part of the alimentary tract, so that the food enters the portal circulation in a condition in which hepatic digestion is impossible, and thus acts as an irritant to the liver tissue. Should the consequent impaired hepatic function result in the passage into the general circulation of material that should have undergone further transformation by action of the liver cells, there is every reason to believe that such substances will act as toxins, because it has been shown experimentally that if an anastomosis is established between the portal vein and the general circulation, of a dog, death soon ensues. The idea therefore is that as a result of imperfect nitrogenous metabolism the blood becomes surcharged with nitrogenous waste material which has a toxic influence upon the tissues generally, including the heart; and not only may direct injury be done to the myocardium, but those same toxins tend to raise and maintain a high blood pressure which by and by produces tissue changes in the arterial walls.

It may be argued against this that there are many dyspeptics who have not any heart trouble, or at most a reflex palpitation, and consequently if imperfect metabolism be the cause, or a contributing cause, of the cardiac changes above described, they should be much more common among dyspeptics than they are. The answer to this is that the patient who primarily suffers from gastric dyspepsia is not at all liable to become a victim of imperfect nitrogenous metabolism, because the immediate gastric distress compels him to eat with great moderation, and only substances which can be easily digested. The man who is most liable to suffer from imperfect metabolism is the one who has an appreciative palate and whose stomach, so far as he can judge by his sensations, is capable of digesting all that he swallows; a man's digestive power is not the indication to the amount of food he requires, and just as the dyspeptic may suffer from inanition because he cannot digest enough to supply the wants of his body, so may the other, by using his palate and freedom from gastric distress as guides to the amount of food he should take, ingest more than can be assimilated and consumed in the ordinary wants of the body, and thus have his circulation overcharged with waste nitrogenous material. The four patients that I have referred to were good eaters, two of them were very hearty eaters, and my experience has been that all patients suffering in a similar manner were or formerly had been good feeders.

In people of such dietetic habits there is a tendency to keep the blood continually loaded with a large amount of nitrogenous material, and when a man is young and of active habits much of it is utilized for purposes of tissue growth and repair, so that the injurious effects are delayed or avoided; but soon after reaching adult life the social responsibilities and changing inclinations are generally accompanied by a great diminution in the amount of exercise taken, and a consequent diminished necessity for such a large quantity of food; nevertheless, our customs are such that at this time of life eating becomes one of the social features of our existence, and the dietary, instead of being reduced, is in many cases rendered more difficult. The cardio-vascular changes consequent upon such habits proceed very gradually, and at first imperceptibly, so that the earliest warning of mischief may be an attack of palpitation or precordial distress after a meal that formerly was borne without discomfort, but which is now made intolerable by the incipient degeneration in the heart and blood vessels. After this an improved diet may prevent future attacks, but the early symptoms may have been ignored or misinterpreted so that the heart remains permanently weak and the progress of the ordinary senile changes in the myocardium and arteries is accentuated. The fact that only a comparatively small proportion of people who over-eat suffer from cardiac disturbance does not in any way invalidate the truth of what we have just said; we cannot tell why one man's heart suffers, while that of a gourmand escapes, any more than we can explain why in one man the moderate use of alcohol is followed by nephritis while it not frequently happens that the kidneys of a comparatively excessive and regular drunkard escape injury. All we can say is that each individual has an idiosyncracy according to which the functional capabilities of his different organs and their susceptibilities to injury vary from those of another, a fact that has been recognized by the laity for centuries and recorded in the homely saying, "One man's meat is another man's poison."

It appears to me that the recognition of the noxious influence which chronic deficient metabolism may have over the heart is of very great importance. A review of past experience brings to my mind more than one patient who complained of subjective cardiac symptoms, but where careful examination only revealed a slight chronic congestion of the liver; yet in some cases a few months later, in others three or four years later, the patient returned with unmistakable evidences of dilated heart and chronic myocardial change. These patients I had originally sent away with the assurance that they need not worry, as their hearts were all right, and as there were not any marked symptoms of gastric indigestion, but simply a slight persistent enlargement of the liver, no special instructions regarding diet were given. Of late years I have learned to view such patients with some anxiety, and not simply to pass them by as victims of an overwrought nervous system who only required reassurance.

While the object of to-day's lecture is to discuss these cases in which the cardiac changes are secondary to disturbed alimentation, it is always well to bear in mind the fact that a similar condition occurs where the heart lesion has been primary and failure of compensation leads to passive congestion of the portal circulation with consequent embarrassment of the functional activity of the entire digestive apparatus. A heart should not be regarded simply as a central organ which when out of order produces disturbances in other organs; it should also be remembered that the disordered viscera reflect injuriously upon the welfare of the heart itself, and that any general disturbance of the circulation must interfere with the nutrition of the heart. It therefore follows that not only must the heart itself be treated, but secondary disorders in other organs must be removed simultaneously if compensation is to be restored.

The treatment naturally is considered under the head of diet, exercise and medicines, and, as in this particular group of cases we are dealing with maladies originating in disordered nutrition, we shall discuss the diet first as it is of paramount importance. Since the maladies appear to a great extent to originate in disturbed proteid metabolism, it might seem that the whole matter could be very easily adjusted by reducing the amount of nitrogenous substances ingested, but unfortunately the problem is rarely capable of such easy solution because trouble is not

always due to an excess of nitrogen ingested, but more frequently to interference with its digestion and assimilation, and consequently it behooves us to find out where the flaw is, whether it lies in an excess of nitrogenous food, or the form in which it is taken; or the nitrogenous food may be all right, both in quality and quantity, but the hydrocarbons and carbohydrates are in excess or of such a nature that they disturb digestion and thus prevent the digestion of an amount of proteid material that is absolutely necessary to the best welfare of the patient; or there may be changes in some of the viscera, such as cirrhosis of the liver, which diminishes the activity of the organ, and imperfect metabolism results. The diet therefore should only be prescribed after a careful inquiry into the patient's habits as to food and drink; let him state distinctly the kind of food and the amount of each that he takes at breakfast, lunch and dinner; he must also say how many hours elapse between meals, and whether he is in the habit of eating or drinking between meals. It is only thus that it is possible to determine what constituents of the dietary are responsible for the symptoms and physical signs presented by the patient.

In arranging a diet for these patients it must be remembered that we are dealing with pathological conditions, and therefore that in many instances the ratio of foodstuffs to one another cannot be maintained; also that the quantity must vary with the amount of work which the patient has to perform. Some idea, however, of the approximate amount of food that we should allow the patient, were he in health and following his usual vocation, is of use in enabling us to form an estimate of whether the patient is eating a proper quantity, and how much we should allow him. My usual way is to figure on the basis that a man should have a total daily allowance of food amounting to 1-30th to 1-25th of his normal body weight. The latter quantity is only for those who are doing active bodily work requiring muscular exertion, and consequently, as patients suffering from the maladies we have under discussion are generally passed middle life and not given to muscular effort, the first figure is more frequently appropriate to that age. Again, more than half of this allowance should consist of inorganic food (water and salts), the remainder of organic food (animal and vegetable food), and animal food should comprise only 1-4th of the organic food. Thus a professional man over fifty years of age and weighing 180 pounds would be entitled to 6 lbs. of foodstuff daily, of which 3½ lbs. would be inorganic and 2½ lbs. or 40 ounces organic; the organic would consist of 10 ounces meat (this makes an allowance of about 20 per cent for water in the form of bone, etc.) and 30 ounces vegetables, bread, etc. Nearly every person can tell us approximately the weight at which he feels in best condition, and this I call his normal weight, and upon it base the calculations for his diet. This I have found to be more satisfactory than any system which makes the amount of food the same for all men, irrespective of size and individual idiosyncracy; we must remember that it is natural for some men to be stout, and any attempt to reduce them below a certain weight is accompanied by poor health, while others are naturally of a spare build, and attempts to fatten them are not only futile, but induce gastric disturbance and general malaise.

Having in this way obtained an approximate idea of the quantity of food necessary for the individual patient, we can compare with it the amount which he is accustomed to eat daily, and see whether there is anything wrong in the total quantity or in the proportions of the different varieties; errors in either of these respects must be corrected, and it will be necessary to make special modifications where there is disturbance of the digestive viscera. Thus, as in case "C," where the whole alimentary system was "on strike," it may be necessary to put the patient on milk diet until there are indications of a peaceful settlement and a return of more harmonious action; but in cases such as "D," where digestion was good and the man was eating excessively of all kinds of food and too much albumenoids (he ate meat at every meal), it was only necessary to curtail and rearrange his whole diet.

While it is therefore necessary to arrange the diet according to each individual, there are certain instructions which may be given to all regarding articles of food to be avoided, intervals between meals, and other matters that are of great importance to secure perfect digestion and metabolism. (1) The daily amount of food should be divided into three meals, all nearly equal in quantity; but the articles that are most difficult of digestion should be taken at the midday meal, and the lightest in the evening. The custom of making one very hearty meal in the day, especially in the evening, while breakfast consists of a little fruit, and lunch of a cup of soup and a biscuit, is to be condemned, both because it overcharges the blood with a large amount of nitrogenous waste at one time, and also for the reason that stomach will not have time to complete digestion and empty itself before the patient retires to rest; if on the other hand, the amount of food is divided up more equally throughout the day, then the waste matter in the circulation is never more than can be excreted. (2) The meals should never be less than four hours apart, so that the stomach can empty itself and rest for some time before it is called upon to dispose of more ingestion. (3) No food should be taken between meals. (4) A glass of hot water should be taken every night upon retiring, as this is the best way of flushing not only the stomach, but also the liver. (5) Alcoholic stimulants should be avoided, if possible, but if they must be given, then whiskey and water, or a light Moselle wine are to be preferred. Champagnes, sweet or heavy wines should be forbidden.

Exercise is beneficial in the treatment of this malady, not only on account of a direct influence upon the heart by increasing circulation through the coronary arteries, and thus promoting the nutrition of the myocardium, but also for the reason that the respiration and general circulation are improved so that metabolism is more complete and the whole body benefited. Yet a little common sense must be used in prescribing exercise, for many patients require rest, and in all the amount of exercise must be carefully regulated, as much harm has been done by its injudicious use. It is an unfortunate fact that there are many extremists in medicine who pounce upon everything new in the way of treatment, apply it to every case indiscriminately, and bring it into disrepute. Stokes, who was one of the earliest to recognize the value of this therapeutic method, went so far as to compel a gentleman suffering from aortic regurgitation to run behind his own carriage; under the fresh impulse given by the writing of Oertel, many patients were inadvisedly urged to efforts which only resulted in their complete undoing; and within the last few years we have all seen how the Nauheim treatment introduced by Schott has, in the hands of many, become nothing more nor less than a professional fake. Exercise never should be prescribed until by observation the capabilities of the myocardium have been fairly estimated, and then a very sharp line should be drawn between exercise and exertion.

The amount of exercise to be allowed must be estimated according to the individual ability of each patient, but in all of them everything approaching effort, especially sudden effort, should be absolutely forbidden; apart from this the best guide is the production of dyspnea. It is better to tell the patient that any tendency to breathlessness means that he

is doing too much, and consequently that he must rest until fully recovered, and then continue more slowly. This is very important, because there is a very prevalent idea among young men and boys with athletic aspirations that they can "improve their wind" by persisting in an effort when their hearts are already taxed to the utmost limit; and unfortunately the same notion exists among men of middle life who have become fat through overeating and sedentary habits, so that they undertake some task for which they are wholly unprepared, and bring on an attack of heart failure which not infrequently proves fatal. Those patients who cannot take a few steps without inducing dyspnea are not fitted for active exercise, and must be treated by rest, massage and passive movement until the myocardium has recovered sufficiently to permit the employment of resistance movements, and subsequently light forms of active exercise may be prescribed. The Nauheim treatment, with its combined system of baths and gymnastics, is particularly well adapted to this class of cases, not only because of the direct influence upon the heart and blood vessels, but also for the reason that the improved circulation, through the lungs, liver and kidneys, indeed throughout the entire body, conduces to more perfect metabolism and elimination of waste material, and in this way attacks the disease at its origin. Much discredit has been brought upon this method by the haphazard way in which it is sometimes carried out; for while there is only a small proportion of patients to whom it will not be of at least temporary benefit, still there are a few to whom it is wholly inapplicable; furthermore, what is equally important, the directions regarding the strength, duration and frequency of the baths, as well as those relative to the extent and character of the gymnastics, should be the result of a study of the capabilities and requirements in each case, and not simply a perfunctory turning of the patient over to an attendant, with the instructions that he is to have a Nauheim bath, as if it were of no more importance than having his face sponged.

(To be continued.)

TREATMENT OF TYPHOID FEVER.

Outline of Treatment and Results in some of the Cases of the Palo Alto Epidemic of 1903.

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THE OBJECT of the present paper is to give in some detail the treatment of the cases that came under my observation during the epidemic at Palo Alto and Stanford University last spring. Some unusual opportunities were presented to observe, within a short space of time, a considerable number of cases, and as a fairly uniform plan of treatment was adopted and seemed to be generally successful, it may be of value to review it. In the first place some of the difficulties to be met with should be mentioned, for, just as this epidemic came down suddenly upon a wholly unprepared community, so may almost any other community, large or small, be suddenly called upon to face a similar situation. Particularly is this true with our present "happy-go-lucky" control of water supplies, dairies, vegetable gardens, oyster beds, etc. A university community is especially unfortunate when called upon to meet a typhoid epidemic, as it contains so many individuals of susceptible age, the majority of whom are living away from the ordinary facilities of home in the matter of protection, nursing and food. Besides, students are very prone to take poor care of their health, and so pay but little attention to such symptoms as frequently inaugurate typhoid fever.

I have briefly traced the general plan of management adopted in the present epidemic.* Where no hospital facilities are to be had they must at once be instituted for the proper care of typhoid fever. I am fully convinced that the most essential thing in the treatment of typhoid is prompt recognition of the condition, and immediate rest in bed, with proper food and care. Without exception, the fatal cases and the most serious ones that came under my observation, were in persons who had, for one reason or another, kept up and about and eaten improper food after the onset of the symptoms. This was particularly striking in some of the fatal cases. For this reason, above all others, the typhoid fever suspect must at once, and with as little transportation and strain as possible, come under proper care, and stay there until freed from the suspicion of the disease or well again after the fever. In the present epidemic we found it very convenient to group the patients in certain houses or portions of buildings used for residence (dormitories, for instance), and to organize there an emergency hospital, with trained nursing staff and equipment.

Where this was not possible, and cases could not be sent to the hospital without serious risk, they were treated where they were when taken ill. In every case where a typhoid suspect or patient is transported, he should be treated as an ambulance patient in every sense of the word. A trained nurse is indispensable in the care of a typhoid case, from the standpoint of the patient, the family, the community, and, above all, the physician himself. The cases considered in this paper were all cared for by trained nurses, sometimes three for one patient, and sometimes two or more for several patients. One great advantage offered by the grouping of cases together, is the opportunity for several nurses to be present in case of an emergency. Each nurse, whether at a private house or in an emergency hospital, had at her command written orders for everything that was to be done, and was supplied with an emergency outfit for collapse, hemorrhage, perforation, etc.; written instructions of what to do for expected complications, and a list of the more prominent symptoms of each were given her. For every case of typhoid it may seem exaggerated care to have on hand and ready for immediate use the necessary drugs for the various complications, a simple saline infusion outfit, etc., but it saved several lives for me in handling these cases, and I have a wholesome fear of the drug-store delay. It is not only ideal, but absolutely necessary to give each private patient the advantages that come with a well-equipped hospital.

The first and last great problem of every typhoid case is the selection of proper food from the onset of the symptoms until complete health is restored, and that is, as a rule, not until several months have passed. Whenever possible, good unskimmed milk was given. The patient must be carefully studied as to milk digestion. Some did better with two-hourly feedings, some three-hourly or four-hourly; some could best be fed throughout the night; some required a long interval of rest for the stomach. No absolute rule could be laid down as to quantity or intervals of feedings.

A careful study of general nourishment, stools, tongue and abdomen soon makes the best plan clear. Various measures were adopted to suit the milk to the individual taste and digestion of the patient. I learned to look with great concern upon the patient who, in spite of various modifications, was never able to digest milk properly. The addition of limewater, sodium bicarbonate (sol ʒi to Oii) in varying amounts; peptonization, the breaking up of the curd by means of small amounts of babies' foods, the simple dilution with water, the use of broken-up junket, often aided in accommodating the patient to milk. In other cases small amounts of coffee were useful in increasing the palatability of the milk, and the contained caffein had a satisfactory systemic effect. Toast-milk, made by pouring hot milk over thoroughly browned toast and carefully straining it;

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or celery-milk, made by similarly adding some juice from boiled celery, often served a similar purpose. Cocoa or chocolate was badly borne in a number of cases that came under my observation in the practice of others, so it was not used by me even during recovery. There is no question in my mind that milk in some form can properly nourish the great majority of typhoid patients, and that before it is discarded as a diet, a most careful trial of it should be made. A most important point is to know when to stop the milk and begin to give other articles of food. The constant call of the convalescing patient is hard to resist, but must be put off in most cases until ten days or two weeks have elapsed after the febrile stage. In some cases any simple food might do well, but if it does not, the blame falls upon the physician, and it is hard for him to disclaim it. Theoretically, any finely divided food, or even masses of soft food, are in practically a fluid state when they reach the affected part of the bowel, and many physicians have used various forms of food freely; but it seems to me from observing the present cases, a much safer course is to allow no food that will not pass through a very fine strainer, to enter the bowel until two weeks free from fever have elapsed. It is hard to tell just what the exact state of stomachic and intestinal digestion is in a case of typhoid, and it is well to give the patient all possible advantage of the doubt. Two young patients under my care had just begun to convalesce at the same time, when they were given some simple cereal food by stealth, and they immediately had relapses more serious than the original run of fever.

In some cases when milk was not well borne, an ice cream made as follows was used with much success: ℥i milk, ℥ii cream, sugar to faintly sweeten, vanilla flavoring, and frozen solid. This was usually the first food permitted during the recovery stage in all of the cases. If it was well borne, then the following foods in order given: (1) junket; (2) broth; (3) a thin, thoroughly cooked, well-strained oatmeal or farina gruel (boiled two hours), given at first once a day, and then gradually twice a day; (4) a small piece of thoroughly dried toast; (5) some well-cooked rice; (6) a little custard; (7) the juice of a chop; (8) a soft-boiled egg. Then there was a gradual resumption of a simple diet. Careful observation by the physician of the food given must be maintained, as cooks, mother and nurse may not appreciate the need of prolonged cooking.

When discharged, each patient was given a diet list, stating upon it when the different foods could be resumed, the aim being to avoid all indigestible foods and all foods with a marked residue for at least three months. Pieces of gristle and fresh fruit were particularly forbidden. The value of a simple diet for some time after typhoid is often not appreciated; good wholesome food with nourishing properties is required, but the future health of the patient, particularly as regards his digestive system, can be seriously endangered by the temptation to over eat and by the eating of indigestible foods during the somewhat unstable condition of the alimentary canal that follows typhoid. The avoidance of constipation is particularly necessary, and convalescent patients seem to be subject to hemorrhoids. During the epidemic, two patients came to me only because of hemorrhoids. They had evidently had a mild attack of typhoid infection for some weeks. Because of headache and digestive disturbances, they had eaten carefully, but had had great trouble with constipation. Both had partaken of infected milk, and their temperatures were subnormal. Careful feeding and rest soon helped them generally, but with one, a slight operation was necessary to relieve the moderately severe hemorrhoidal condition.

When milk could not be taken, recourse was had to mutton and chicken broth, beef juices, barley broths, etc., but nourishment was never satisfactory. The various peptone preparations are of great value for a short space of time when milk must be stopped because of hemorrhage or perforation, but even here they have a real danger in that they often soon exert a laxative effect upon the bowel. It was of interest to note that in the postmortem of patients able to digest milk, ample body fat was found, but in those kept on the other foods mentioned, the body fat had largely disappeared.

Water.—When possible, large quantities of water, cold, slightly warmed or hot, were given, up to the amount of two gallons in twenty-four hours. This was usually possible without disturbing the digestion by giving the half an hour or so before the feedings. It usually left the stomach promptly, judging from the amount of gurgling to be heard in the region of the stomach soon afterward. In a toxic disease such as typhoid, the value of additional body fluid as an aid to elimination seems indisputable. In cases where water was not well borne by the stomach, careful rectal injections of normal saline infusion were readily absorbed, and had a favorable effect upon elimination, particularly by the kidney.

Grape Juice.—Frequently during the course of the fever, and particularly afterward, the addition of a small amount of unfermented grape juice, either that of the Concord grape or the California brand, was very acceptable to the patient, and aided in taking the water. Particularly was it found useful in the stage of decreased urinary elimination that was frequently observed in the convalescence. In some cases, even when the urine was reduced to 10 ounces in twenty-four hours, it had a most prompt diuretic effect, particularly when used at the same time with coffee in the milk given as food.

Antipyretic Measures.—In all of the febrile cases, an attempt was made to control the temperature by some form of bathing or the administration of external cold. In a majority of the cases, the abdominal coil, with an ice bag for the head, was used. The coil was usually well borne, and had a satisfactory effect upon the temperature. Frequently a piece of gauze is needed between it and the skin, especially with fat persons, in whom the abdominal wall is prone to freeze enough to slough. Two tubs were used, and iced water circulated slowly through the coil. It was found of great advantage to put a funnel covered with gauze over the receiving tube to keep out the dirt contained in most ice; and when the tube became stopped up, a foot bicycle pump promptly cleaned it out. When properly managed, a hard rubber coil is easily handled, and is a comfort to the patient and nurse rather than a source of annoyance. The coil should be carefully selected in order to avoid the soft rubber so often sold. Usually the coil was left on when the temperature was over 100° F. If, in spite of the coil, the temperature rose to over 101.5° F to 102° F., a cold or tepid sponge was given. If it rose still higher, an ice sponge with much friction; if still higher, an ice pack with friction. No tub baths were used or found necessary, and I dread for a typhoid patient the amount of necessary manipulation that a tub bath necessitates. The ice pack did well with the highest temperatures, and was particularly effective when the nervous symptoms became unduly exaggerated. As a rule, it was not found to be depressing to the circulation, although a stimulant was usually given during or following it. The results obtained from its use were at times most striking, particularly when delirium, subsultus tendinum, and even general convulsive body movements resisted other attempts to control them. Particularly was this sedative effect noticeable upon an unusually strong athlete, who, in spite of the efforts of three or four nurses, would get out of bed and walk around whenever his temperature rose to 104°. Wrapping a patient in a sheet wrung out of ice water was frequently resorted to in the very nervous, especially the delirious cases, to induce sleep, and was usually

successful. The presence of pneumonia, or even double pneumonia, was not allowed to interfere with the use of the various applications of cold for the reduction of temperature. But in the patients subject to collapses, great care was found to be necessary in the use of all measures for controlling the temperature, and frequently it was found to be safer to leave off the cold entirely while the danger of collapse seemed imminent. But this was true only to a certain extent, for in the febrile cases, with collapses, when a temperature of about 104° was reached, the collapses were more apt to appear, and so all moderate means to prevent so high a temperature were used.

The question of the increased danger from hemorrhage in the use of the abdominal coil is of interest. Of the nine cases of intestinal hemorrhage that came under my observation, three patients never had the coil used upon them before the hemorrhages took place. The six cases of hemorrhage where the coil was used were all very severe cases, and I thought the coil of great advantage rather than harm, and that it limited the flow of blood. When the hemorrhages did occur, the coil was at once reenforced by a second coil on top of it, or several large, flat ice bags, or both. Such treatment was evidently effective.

Use of Drugs: Intestinal Antiseptics and General Measures.—The selection of a routine drug for typhoid fever, for the purpose of general intestinal antisepsis or for a direct effect upon the typhoid bacillus in the body, is a matter that comes up in every case. It seems clear to me that, until we have proper anti-typhoid serums, we cannot hope to administer any drug, particularly by mouth, that will directly affect the active typhoid bacillus. We may be able to get into the bowel a chemical substance that will destroy the free bacteria there without injuring the intestinal mucous membrane, but we certainly cannot hope to reach the bacilli in Peyer's patches, and those buried in the mucous membrane. These are the ones that are doing the damage. The best that we can hope for at present is a moderate control of the general fermentation, particularly the exaggerated fermentation frequently accompanying the disturbed intestinal digestion of typhoid. This should, when needed, be attempted in each case; but the greatest care is necessary in the selection of a drug for routine use, because the body has enough to do in combatting the toxins injuring and damaging its various cells and tissues without adding depressing or irritating drugs to hamper the heart or injure the kidney. The array of so-called specific drugs with which a physician, in a community where typhoid is prevalent, is assaulted from various sources, particularly pharmaceutical firms, is astonishing. In many cases I found that no drug treatment was good treatment; but in others, where the intestinal disturbance was marked, I found that a capsule of salol gr. ii or iii, guaicol carbonate gr. i to iii, given one to three times per day was of great service. But its administration was always carefully checked by urinary examinations, and I never felt secure or unconcerned in its use. In severe cases of fermentation with loss of bowel tone and distension of abdomen, almost uniformly gratifying results were obtained from the use of oil of turpentine given in an emulsion with compound spirits of lavender. The dose varied from a drop to thirty drops of the rectified turpentine. Its value, particularly combined with the external use of turpentine stupes to the abdomen, was frequently most striking, but the urinary secretion had to be carefully watched.

Stimulants.—In the majority of cases treated by me, brandy or whisky was used at some time during the fever, and frequently throughout the period of severe symptoms. Its value was often striking, particularly in cases where the general nourishment was poor; where the pulse became thready and unsatisfactory, and where pneumonia was present. When beneficial, it had no bad effects that I could ascertain, even though taken in large amounts. It seemed to be readily consumed and of great general body help, as well as an aid to the cardiac muscle. In cases where its administration produced the series of symptoms that one sees from its use in healthy men, it was not found to be of much value, and was temporarily or permanently discarded. Giving it in milk was often unwise, as it seems at times to interfere with the digestion of the milk and to turn the patient against milk as a food.

Strychnin.—The value of strychnin in typhoid was frequently tested, and, while not without its dangers, was found to be of the greatest service. Particularly was this true for prompt stimulation when required during the fever, and for fairly regular administration, either in tablets or in a syrup with hypophosphates, iron, etc., during the convalescent period. In only one case did it seem to increase the nervousness; in most patients it rather lessened the nervous symptoms. Its great danger is its stimulation of peristalsis and the temptation to use it when the collapse following hemorrhage occurs. Its value in the treatment of collapse will be noticed under a later heading.

Caffein Citrate.—This drug, by mouth or hypodermically, was found particularly valuable as a cardiac stimulant and diuretic when the strychnin alone was not successful.

Sedatives.—The cold pack was the most uniformly successful sedative and hypnotic used. The best drug was heroin hydrochlorid gr. 1-24 to 1-12 given hypodermically. It was of the greatest value for hypnosis, but frequently quieted delirium and convulsive movements. Morphin was occasionally used, but not with gratifying results, for although it frequently helped temporarily, it seemed to disorganize digestion and increase the tendency to constipation so much that it did more harm than good. Heroin also is not blameless in these regards, but was found not to be so troublesome as morphin.

Chloretone, in doses of 5 to 30 grains, particularly when combined with sodium bromide, and given in a warm, small, mucilaginous, fairly high rectal injection, was frequently strikingly helpful and not noticeably depressing. In several cases when all other sedative measures failed, a hypodermic injection of 1-200 to 1-75 of a grain of hydrobromate of hyoscin had a prompt and most beneficial effect.

Enemas and Laxatives.—A most uniform manifestation of this typhoid epidemic was the presence of obstinate constipation. Its control was a matter of considerable concern. In many cases, small daily low injections of glycerin 1 oz., water 3 ozs., were alone required. In others soapsuds injections in somewhat larger quantity. Great care was taken not to use plain water, which merely distends the bowel, and depends upon that for the excitation of peristalsis, rather than on a chemotaxic effect, and also not to use too large a quantity or put it in too high. Where saline injections were given for general effect or to flush the lower bowel rather than to excite peristalsis, great care was taken not to have them given too high, too great in quantity, too rapidly or with too great pressure. The postmortem observation of a typhoid colon is sufficient to show that if distension did not directly induce hemorrhage or perforation, it could bring about marked changes in the repair of the ulcerated areas. In very obstinate cases of constipation, it was considered wiser to use a combined enema of turpentine ʒi to ʒiv, molasses ʒv, Epsom salts ʒii to ʒvii, and water 0ii, rather than to excite too great and continued peristalsis by large doses of cathartic drugs.

(To be continued.)

ECHINOCOCCUS OF THE LIVER—WITH REPORT OF A CASE.*

By CLAIRE W. MURPHY, M. D., Los Angeles.

MY OBJECT in reading to you a paper on echinococcus of the liver is a selfish one. I wished to read the literature on the subject, and also to obtain your opinion and experience.

Osler reports only eighty-five cases in Canada and the United States. My own experience with the disease is one undoubted case of hydatid of the liver, and a possible one of the peritoneum, adjacent to the cecum.

The embryo of the tenia echinococcus of the dog when ingested by man is freed from its eggshell by digestion; then either enters the general circulation, passing thus to the eye, the brain, the kidneys, lungs, etc., or the portal circulation to the liver, or else makes its way through the intestinal wall to the peritoneal cavity, omentum or abdominal muscles. When implanted in an organ the hooklets disappear, and the embryo eventually becomes a cyst. This cyst, by its presence, produces an irritation that results in the formation, from the surrounding tissues, of a fibrous capsule or wall. The cyst wall proper is composed of an outer laminated membrane and an inner parenchymatous granular one. From the inner layer buds are protruded that form eventually daughter cysts; these finally become detached, and from their interior are developed granddaughter cysts. The fluid in the cyst is non-albuminous, clear and of a specific gravity of 1005 to 1009. It may contain sugar. Ordinarily the scolices and characteristic hooklets can be seen microscopically. The echinococcus may live many years. When it dies the cyst is converted into a putty-like mass, which may be partially calcified. Several years ago, in making an autopsy on a demented old man who had died from chronic diarrhea, I found a cyst containing granular putty-like material, in the neighborhood of the cecum, which I now think must have been of echinococcic origin. No microscopical examination was made. The cyst may rupture. If externally, this may result in a cure. Of course if it ruptures into a large blood vessel or the peritoneal cavity the result may be most serious.

Dr. Paul Bresee of Los Angeles reports to me three cases that he has seen. In two the patients expectorated large quantities of bile-stained pus which contained characteristic hooklets; both patients recovered. The third case was discovered in an autopsy. It was not suspected during life.

The seriousness of suppuration of the cyst varies. Many times it produces symptoms of pyemia; sometimes the symptoms produced are few.

The following case illustrates the few symptoms that may arise from the suppuration of the cyst:

Miss O., native of California, nurse, never had a pet dog. For a year she had some discomfort in lower part of the right side of chest. On six different occasions had severe pain in this region, with dyspnea and difficulty in raising right arm from side. These symptoms lasted for about three hours. Early in December she consulted Dr. John L. Kirkpatrick, with whom I saw her. At that time a fluctuating tumor, not painful, the size of a duck's egg, could be felt over the right eighth rib, in the middle axillary line. Temperature ran for three weeks from 99 to 100 degrees. She continued to work for three weeks, and then consented to an operation, in which I had the pleasure of assisting Dr. Kirkpatrick. The tumor contained pus. When cleaned out, a small opening could be seen in the costal space. Four inches of the eighth rib was resected. A large quantity of pus escaped. A hole in the diaphragm was found. Through this a large cavity, containing pus and laminated membrane, was emptied. Gauze was used for drainage. The hooklets were found. The patient seems to be practically well. Very little drainage of pus from pleural cavity.

Australia and Iceland are the two countries in which the disease is most frequently found. Sheepherders and men who are brought in close contact with dogs are prone to have the disease. In over 50 per cent of the cases of hydatid disease, the cysts are found in the liver. They are usually found on its convex surface. If in the right lobe, it pushes up the diaphragm, frequently perforating it, and thus entering the right pleural cavity. Large cysts, as a rule, would present the signs of a tumor of the liver. Small cysts produce few symptoms, and even large cysts, in this situation, and until they suppurate, may only produce feelings of weight and distress. If in the left lobe, a cyst will push up the heart, and there will be an increased area of dulness in that region. It may break through the diaphragm and open into the pericardial sac. If the cyst is superficial, hydatid fremitus may be produced. One hand is laid lightly over the tumor, while the other is used to percuss it. A trembling motion is felt for some time after percussion has ceased.

Urticaria often follows rupture or aspiration of the cyst. Great enlargement of the abdomen, with dullness extending toward and continuous with the liver, especially if it is of long standing, and the health is not impaired, is suggestive of echinococcus of the liver. Echinococcus of the liver has been mistaken for ovarian cyst, hydronephrosis, dilation of the gall bladder and empyema, or pleuritic effusion. The gall bladder secretion is mucoid, and the tumor is pear shape. In hydronephrosis, exploratory puncture may have to be employed in order to differentiate the conditions. In pleuritic effusion and empyema the process is much more acute, and the upper level of the area of dulness is concave, while in the hydatid it is convex.

Pancreatic cyst is formed much more rapidly than hydatid cyst; usually follows an injury, and as a rule starts from the tail of the pancreas; hence lies behind the stomach and in the left hypochondriac region. However, I have had one case of pancreatic cyst originating from the tail of the pancreas which simulated in every way an attack of suppurative appendicitis. It is easy to conceive that a pancreatic cyst which presents itself toward the right hypochondriac region might, from position, simulate a hydatid cyst growing from the under surface of the right lobe.

If the cyst is best reached through the abdominal cavity, it should be walled off from the balance of the peritoneal cavity by gauze, its capsule sewed to the incision in the abdominal wall, its cavity opened and the cyst's contents, including the fluid, membranes and daughter cysts, removed, and gauze drainage made.

If it has ruptured through the diaphragm, a sufficient opening should be made, by resecting ribs, to thoroughly drain the cavity. It is very important to remove all the membranes and daughter cysts. If this is done most of the patients recover.

[For discussion see JOURNAL, May, page 160.]

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

THE BOARD OF MEDICAL EXAMINERS.

Dr. John C. King, of Banning, gives his views of the members of the board in the *Southern California Practitioner*. Part of his paper is given below:

The new board met and organized on August 1st; an eclectic, Dr. Perce, of Long Beach, was made president. Dr. Perce is a large, affable, good-natured man, who does an excellent business. He is one of those self-made, practical fellows, not overburdened with collegiate culture. While his grammar is not irreproachable, his heart is in the right spot. His examination papers were practical, and his markings generous. If I were a candidate I would like the whole world to consist of Perces. His colleague, Dr. Mitchel, professor of practice in the Eclectic College of San Francisco, is a handsome man, clad in Prince Albert, very quiet, difficult to "size up." His questions on obstetrics were good. In marking he seemed disposed to give the candidate the benefit of any doubt.

Dr. Tisdale, dean of the Homeopathic College of San Francisco, was elected secretary. This officer is not allowed to participate in examining. Both the so-called sectarian schools are represented on the board by medical teachers. Our own school has ruled, so far, that professors in medical colleges must not be state examiners. Dr. Buell, of Los Angeles, the other homeopathic member, is a keen, clean, well-built gentleman; iron gray all over, from hair to trousers. Buell ranks high as a surgeon. He is a man one is proud to call "doctor," regardless of school. Dr. Buell conducted the examination in surgery. Dr. Cothran, of San Jose, is a new member. Tall, straight, dignified, with clean-cut features; a graduate of a California college; apparently a good representative of modern medicine. He did his work well and conscientiously. Dr. Lockwood, of Pasadena, is an alternate, but acted in place of Reinhart, of Berkeley, who is in Europe. From surgery to chemistry he is an all-around, well-qualified man. His questions on chemistry were models. None of them merely technical; all of them essential—genuine medical chemistry. Dr. Thorne, of San Francisco, is an old member. I am told he is respected by the united profession of that wicked city. The statement is no small compliment, because, so far as I could observe, the profession there is united in nothing else. Thorne is past middle age, an influential member, very just, I think, yet disposed to be very generous toward "old practitioners." And then Dudley Tait. It is said Tait is a Frenchman. At any rate, he looks it; neat, natty, impetuous, dictatorial, yet polite. For years Tait has led the fight for the medical laws. In the societies, in the police courts, before the legislature, on the board, above all things Tait has been a fighter. Not always tactful, disposed to be a trifle inconsiderate of others, yet always on top. The profession, not only of this state, but of America, is indebted to Dr. Tait. It so happens that fighters will tread on people's toes, and I opine that many sore digits would find relief if planted firmly in the slack of Tait's trousers. The doctor has been accused of rank fraud, of discriminating in favor of, or against, certain individuals, colleges and systems of medicines. I went to the meeting prejudiced against the fellow, and watched him closely. I liked him. In my judgment he was "square" and impartial. Personally I would not hesitate to appear before Dr. Tait for examination, granting, of course, that I know a great deal more than I do. The remaining member of the board, from Riverside county, conducted himself with the retiring modesty befitting a novice from the rural districts.

At our first meeting seven gentlemen were refused admittance to the examination because of defective credentials. Certain of them had crowded three courses into two calendar years by going from one college to another—perhaps by taking a summer course. In other cases the college of graduation had admitted them to advanced standing upon insufficient grounds—or the college of entrance had neglected to demand a diploma from a high school or its equivalent. So far as I could determine, all of these gentlemen had acted in good faith. In most instances their respective colleges were to blame. Competition had made them lax in fulfilling the requirements of their own announcements. For most of the seven the action of the board (which the law made mandatory, not optional), meant another six months' course. The seven represented a number of different colleges. In addition, the whole graduating class of Hahnemann College of San Francisco was refused admission to the examination.

I found it a pleasure to be a member of the board; to meet fellow-members, to observe the working of our more than excellent law, and, particularly, a pleasure to know positively that, regardless of difference of "school" and of opinion as to methods, etc., the spirit of the board was one of absolute fairness and perfect harmony.

SECOND ANNUAL MEETING OF THE PACIFIC ASSOCIATION OF RAILWAY SURGEONS—OFFICIAL MINUTES.

The second annual meeting of the Pacific Association of Railway Surgeons was held in the St. Francis Hotel, San Francisco, on August 17 and 18, 1904. The meeting was called to order by the president, Dr. W. B. Coffey of San Francisco, who read the following address:

Gentlemen: In calling this meeting to order, let me congratulate you at the goodly number present. It is an evidence of rapid development and augurs well for the future. A little more than a year ago our society had its conception, and at the meeting in 1903 it became a full-born, a full-fledged child. At that time I briefly outlined its purposes and objects.

Perhaps we have not as yet attained that degree of efficiency and usefulness which had been hoped for by its founders; but youth requires experience and ambition serves as a foundation for success. Let us hope, therefore, that the spirit of the beginning will be kept alive. Let ambition be our watchword, and that, added to energy and perseverance, will surely develop success.

It is not my purpose at this time to present you any treatise on some special subject, but rather to make some cursory and general suggestions of my conception of some of the duties and responsibilities of a railway surgeon in his relation with his employer, as also the traveling public. The occupation of a surgeon is a profession, not a trade. To attain his objects he should be not only a man of the highest character but of the most delicate feelings. In no instance can these traits and qualities be better exemplified and demonstrated than when called upon to examine and report upon the condition of one who has met with an accident and concerning whom a question of legal responsibility may arise. Such a patient often views a visiting railway surgeon with distrust. He is very prone to the opinion that you will minimize his injuries and will not approach you with that candor so necessary to make a true and honest diagnosis.

On the other hand the surgeon is the paid employee of the company, and presumably is enjoined to aggrandize its best interests. You can appreciate that under such conditions, his position is a delicate one. As a student between every line of the lectures given him are read the inculcations of morality. At every clinical demonstration is suggested that he discover and determine the exact truth. With these principles ever borne in mind, he should approach his duty unflinchingly. Examine and determine only as his best and honest judgment shall determine, and irrespective of responsibility, let it fall where such responsibility may.

There is another matter which I feel should not be passed without notice, and which in my judgment serves to demonstrate the qualities of a surgeon. I allude to the calls in emergency cases. This is a subject which should receive deep and earnest consideration at your hands. Experience has demonstrated that the first treatment has in many cases determined the final result. Those under the cover of a hospital with every facility that human ingenuity and skill can devise, with time and opportunity to diagnose and operate, are entitled to their full credit for success, but all praise to him who is suddenly called to the street or the road and with limited means or facilities, and only by his genius and professional acumen, stems the tide of maybe a fast ebbing life, and then hurries the patient on to a hospital where there is nothing left to be done but to complete the work so skillfully started. How aptly this is illustrated in compound fractures where the wound is covered with dirt, grease or other foreign substances.

Another illustration of responsibility is that which attaches to the selection of employees. Our duties in this respect are twofold, one to the company, the other to the public. There are no qualities so necessary to the proper performance of duty by an employee as that of the senses of sight and hearing.

As a train rushes along in its outward flight, the lives of the passengers are in the keeping of the crew of the train. They must be ever alert and watchful, and to be so they must be possessed of those physical qualities which conserve alertness and watchfulness, that is, acuteness of sight and hearing—there is where the surgeon should serve his employer well. Here is where there is also placed in his hands the obligation of anticipating not so much damage to the company, but appalling sacrifice of human life.

The careful study and consideration of deficiencies in this respect is an obligation that we cannot and should not avoid.

There are many more suggestions that I might make on the lines adverted to, but I feel that I might in a measure weary you. What is more, papers on various subjects and matters are to be read and I should not encroach upon your time unnecessarily. I have but one further suggestion to make, which occurs to me would not be remiss at the present time.

It is the experience of every one of us that cases constantly occur which from their character and their mode of treatment serve as a source of enlightenment and education. I think I can say without any spirit of vanity that there is no calling in life where its members are so unselfish as physicians and surgeons, not only in their readiness to answer the calls of the sick without the hope of compensation, but also, when by research or study, they have discovered some new and beneficial method or system of alleviating human suffering, or giving the benefit of such research and study to the world. So thoroughly has this latter idea been imbued in the heart and mind of the physician and surgeon that it stands out prominently to-day as an unwritten law of the profession. That we, as doctors, do not always receive the benefits of such research and ideas is not from lack of desire on the part of the student, or discoverer, but rather from the lack of opportunity.

With a view of development and progress on these lines, I suggest that the committee on publication be given the power to publish the proceedings of the annual session and the engrossing therein such papers as we shall read at such sessions; that the members be invited to present to the committee during the interim between sessions such ideas as may, in their judgment, serve as a source of instruction and education. By this I mean the submission of papers on such cases that may come under their personal observation. These in turn to be published in pamphlet form, and distributed to the members free of charge.

In conclusion, let me add. It is said "a little nonsense now and then is relished even by the wisest of men."

Your officers believe that you should indulge in and have prepared for you a little nonsense. After laying aside the business of the meeting, you are expected to convene again in extraordinary session around the banquet board. The hour will be 7 P. M. to-morrow, and the place the St. Francis Hotel. Do not fail, one and all to be there.

The following applicants for membership in the association were reported on favorably by the executive board: Dr. J. C. Hearne, San Diego, Cal.; Dr. D. C. Lazier, Arlington, Ore.; Dr. W. V. Nichols, Oceanside, Cal.; Dr. F. M. Seibert, San Mateo, Cal.; Dr. J. J. Moyer, Mayfield, Cal.; Dr. T. M. Topp, Raymond, Cal.; Dr. L. P. Hall, Dixon, Cal.; Dr. H. P. Palmer, Vacaville, Cal.; Dr. W. H. Porter, Calistoga, Cal.; Dr. J. W. Jesse, Santa Rosa, Cal., Dr. E. B. Ketcherside, Yuma, Ariz.; Dr. J. A. Ketcherside, Yuma, Ariz.; Dr. Chas. Teubner, Saticoy, Cal.; Dr. A. E. Ealy, Kingman, Ariz.; Dr. G. R. Carson, San Francisco, Cal.; Dr. W. Lee Moore, Verdi, Nev.; Dr. G. A. Broughton, Oxnard, Cal.; Dr. T. C. Edwards, Salinas, Cal.; Dr. D. D. Crowley, Oakland, Cal.; Dr. F. L. Adams, Oakland, Cal.; Dr. C. L. Abbott, Pt. Richmond, Cal.; Dr. J. R. Colburn, Los Angeles, Cal.; Dr. Guy Cochran, Los Angeles, Cal.; Dr. H. D. Lawhead, Woodland, Cal.; Dr. J. T. Colliver, San Bernardino, Cal.; Dr. Jno. Fife, Red Bluff, Cal.; Dr. A. M. Henderson, Sacramento, Cal.; Dr. F. Wilkes, Oakland, Cal.; Dr. E. N. Tiffany, Coalinga, Cal.; Dr. J. P. Gale, Arbuckle, Cal.; Dr. J. V. Larzalere, Escondido, Cal.; Dr. R. B. Williams, Sausalito, Cal.; Dr. J. J. Spottiswood, Mill Valley, Cal.; Dr. J. C. Booth, Lebanon, Ore.; Dr. Carl Kurtz, Los Angeles, Cal.; Dr. T. W. Huntington, San Francisco, Cal.; Dr. W. J. Circe, Carson City, Nev.; Dr. A. M. Smith, Merced, Cal.; Dr. C. H. Ingram, Clovis, Cal.; Dr. J. D. Reed, Covina, Cal.; Dr. O. P. Askam, Mountain View, Cal.; Dr. J. H. Tebbetts, Hollister, Cal.

Election of officers for the ensuing year:

President, Dr. N. H. Morrison, Chief Surgeon, Santa Fe R. R. Co., of Los Angeles, was nominated and unanimously elected.

First Vice-President, Dr. H. W. Fenner of Tucson, Arizona, was nominated and unanimously elected.

Second Vice-President, Dr. W. O. Spencer of Huntington, Oregon, was nominated and unanimously elected.

Secretary, Dr. James P. Dunn of Oakland was re-elected.

Treasurer, Dr. F. L. Adams of Oakland was nominated and unanimously elected.

Dr. E. M. Keys of Alameda was nominated to fill vacancy on the executive board and was unanimously elected.

The newly elected president, Dr. N. H. Morrison, appointed the following as members of the committee of arrangements: Dr. W. B. Coffey, San Francisco, chairman; Dr. D. D. Crowley, Oakland; Dr. J. H. O'Connor, San Francisco.

MEETING PLACE FOR 1905.

Grand Canyon, Arizona, was nominated by Dr. N. H. Morrison; Sacramento, Cal., was nominated by Dr. A. M. Henderson; San Francisco was nominated by Dr. S. E. Pinniger; Portland, Oregon, was nominated by Dr. H. Hildreth. San Francisco received a majority vote of the members present and was therefore named as the next meeting place.

This finished the business part of the meeting. The following scientific papers were read:

Address of the President, W. B. Coffey, San Francisco; reading of the minutes of the previous meeting, reports of officers, committees, miscellaneous business and announcements; "Appendicitis," J. H. O'Connor, San Francisco; "Ethyl Chloride as an Anesthetic," W. W. Fitzgerald, Stockton; "Railway Spine, the 'term' as misleading, with especial care in the Diagnosis," J. W. Graham, Lompoc; "Tenotomy of the Tendo Achilles in Fractures of the Leg," A. W. Morton, San Francisco; "Report of a Severe Case of Railroad Injury, Involving Fracture of the Spine and Extensive Crushing of the Foot, Resulting in Recovery," T. C. McCleave, Berkeley; "Dermatitis Herpetiformis—Report of a Case," Robert A. Peers, Colfax; "Report of a Case of Fracture and Dislocation of Pelvis," and "Observations on Treatment of Ununited Fractures," S. J. Gardner, San Francisco; Exhibition of patients and surgical clinic at the S. P. Co. Hospital, 14th and Mission streets, by members of the association; "Where to Amputate the Leg," J. P. Dunn, Oakland; "Rupture of the Urethra,"

Granville MacGowan, Los Angeles; "Traumatic Pneumonia," O. P. Askam, Mountain View; "Chronic Ethmoiditis in Its Bearing Upon the So-called Chronic Catarrh of the Nose and Throat," Redmond Payne, San Francisco; "Report of a Case of Nephrectomy for Multiple Calculi," and "Of a Case of Rupture of Bladder," Geo. A. White, Sacramento; "Some Observations on Railway Hygiene," B. Woodridge, Rocklin.

COUNTY SOCIETIES.

Alameda County.

Regular monthly meeting, October 11th, the president, Dr. J. Maher, in the chair. Dr. L. L. Riggire read a paper on tne subject of "Nostrums." The doctor defined nostrums as being extra-pharmacœpial in their relation and more or less secret or proprietary in their origin. Although the sale of this class of drugs is steadily increasing, yet very few men have grown wealthy through handling them, because of the great expense of advertising. It is a lamentable fact that the medical men of to-day are prescribing proprietary remedies more than ever before. The smooth-tongued commercial traveler beguiles the unwary doctor to stultify himself and lend an aid in the swindling of the public.

Dr. L. P. Adams then read the histories of two cases of cystic kidneys. One case was diagnosed during life, the other only at autopsy. In summarizing, the doctor said that accurate diagnosis of bilateral cystic affections of the kidney was difficult, due especially to the fact that cases are seen with signs of cardiac insufficiency and dyspnea, and thus very little attention is directed to the kidneys, or that they are attacked with sudden coma or uremia; but slight aid can be rendered the patient when this condition is recognized. Blood and urine examinations are not constant confirmatory evidence of the lesion. Any surgical procedure is necessarily unsafe. That the most reliable signs and symptoms are the high arterial tension, cardiac hypertrophy, a constant low urea excretion and the presence of an indefinite mass in each renal region.

J. M. SHANNON,
A. S. KELLY,
Publication Committee.

Butte County.

The regular meeting of the Butte County Medical Society was held October 8th, in the offices of Dr. Musgrove, Chico.

After passing resolutions of sympathy for the late Dr. J. T. Harris, Dr. Musgrove read a very interesting paper entitled "Sanitation in Towns." Dr. Philo Hull opened the discussion, and all present offered suggestions as to the best methods to prevent the spread of disease in towns.

A committee was appointed to bring charges against and prosecute an illegal practitioner, Dr. Wah Hing (Chinese).

Whereas, In the death of Dr. J. T. Harris, the Butte County Medical Society has sustained the loss of an earnest and much respected member, his fellow practitioners a true friend ano an able counselor, and the community a conscientious and devoted physician; therefore oe it

Resolved, That we extend to his bereaved family in their hour of sorrow this last token of our respect and esteem; and be it further

Resolved, That a copy of these resolutions be sent to his family, and a copy also forwarded to the STATE JOURNAL, for publication.

Respectfully submitted,

D. H. MOULTON, M. D.,
L. C. PERDUE, M. D.,
W. B. JOHNSON, M. D.,
Committee.
D. H. MOULTON, Secretary.

Humboldt County.

At the time of the September meeting of the Humboldt County Medical Society Dr. George C. Pardee, Governor of California, was visiting Humboldt, and instead of holding the regular meeting, it was decided to give a reception and smoker to Dr. Pardee. The reception was held at the Chamber of Commerce rooms, and was attended by about thirty of the county physicians.

Dr. G. W. McKinnon, president of the society, introduced Dr. Pardee, who gave the members a very pleasant half hour's talk, dealing with some of his experiences while practicing medicine. After this, cigars were in order until about 9:30 o'clock, when Dr. Pardee had to leave to keep another engagement.

The regular October meeting was held in Eureka, Tuesday evening, October 11th. Considerable time was spent in discussing the best method of dealing with illegal practitioners, some of whom are in Humboldt. It was decided to leave the matter to the legislative committee of the society, who were given power to act as they thought best.

The paper of the evening was read by Dr. John J. Gaynor, of Eureka, on "Muco-Membranous Enterocolitis." Dr. L. P. Dorais, of Eureka, reported a case of chronic suppurative otitis media in which he had removed the ossicles; patient made a good recovery, and hearing in affected ear is fairly good since operation. Dr. C. O. Falk, of Eureka, reported a case of hysteria in a girl of fourteen, in which, on three or four different occasions, parents reported that child had not passed urine for four or five days. She was placed in a hospital, under the care of a nurse, and on each occasion, under careful watching, it was found that she passed a normal quantity of urine in twenty-four hours. The child succeeded in deceiving the parents completely when at home.

G. N. DRYSDALE, Secretary.

Orange County.

The Orange County Medical Society met in regular session Tuesday evening, Oct. 4th, with fourteen members present. Considerable time was consumed in reading and adopting a fee bill. Dr. J. I. Clark was elected to membership and the application of Dr. Jessie M. Burlew was filed. Dr. Burlew comes to occupy the offices of Dr. R. A. Cushman, who left the first of the month to enter upon his duties as assistant physician in the asylum at Ukiah, Cal. Dr. Royer read a very interesting paper on the old, old subject "Anesthetics in Obstetrics" which brought out the usual discussion this subject always does.

H. S. GORDON, Secretary.

Sacramento County.

The Sacramento Society for Medical Improvement met in regular session at the office of Dr. G. C. Simmons, August 23rd. The president, Dr. Henderson, occupied the chair, and the following members responded: Drs. W. A. Briggs, Cartwright, Foster, Henderson, Krull, Lindsay, McKee, Nichols, Parkinson, Ross, G. C. Simmons, G. L. Simmons, Strader, Twitchell, J. L. White, Wright and Wheeler. Dr. Henderson presented the name of Dr. Miner as an applicant for membership in the society. The application was allowed to take the usual course. Dr. Cartwright presented a case of a woman aged 67 who had recurrent appendicular trouble and who refused operation; she had also a troublesome recurrent neuralgia of the inferior maxillary division of the fifth nerve. The paper of the evening was read by Dr. G. C. Simmons on "The Present History of 'N' Rays." Discussion was opened by Dr. E. W. Twitchell. Dr. Twitchell thought that on account of the doubt as to the existence of "N" rays, a discussion of their properties was rather premature.

Several prominent investigators had been unable to demonstrate the presence of the rays. One prominent man spent fourteen days in a fruitless attempt to find them. But if rays of such a nature could be demonstrated, with their alleged qualities, they would be a boon to medicine. Dr. W. A. Briggs thought that the positive testimony as regards the existence of the rays was better to be accepted rather than negative testimony. Several other members joined in the discussion, after which the meeting adjourned. J. W. JAMES, Secretary.

San Joaquin County.

The regular meeting of the San Joaquin County Medical Society was held at the office of Dr. R. B. Knight, September 27th. During the vacation months of July and August the society holds no meetings. Dr. Knight read a paper on "The Value of Antitoxin in Diphtheria." In this city and immediate neighborhood the doctor recently treated twelve cases; every case was of most severe type. Antitoxin was used in every case. All recovered with the exception of two patients in the country. These cases were well advanced and without treatment during their illness of a week. Both died of paralysis of the larynx and the doctor believes that the antitoxin had no effect on the result. The paper was liberally discussed. The next meeting will be held at the office of Dr. S. E. Latta.

BARTON J. POWELL, Secretary.

San Francisco County.

The meeting was called to order at 8:45 o'clock, the president, Dr. Rosenstirn, in the chair. Minutes of the previous meeting were read and approved by the Society.

Propositions for membership: Drs. Mary Turnbull, Millicent Cosgrave, James Hannah, Arthur Hirschfelder, Max Magnus, Wm. F. Blake.

Report of Committee on Admissions: Drs. A. H. Wright, Morton E. Hart, F. H. Zumwaldt, J. W. Gunn, Jr., James K. Hamilton, Anna E. Sweet, Russel W. Preston, C. N. Ellinwood, Louis Jacobs, J. A. Ellis, and B. Thomas were elected members of the Society.

Dr. Huntington presented an old case of bone transplantation. You will recognize this case as the one of bone transplantation which I presented before. It was a case of osteomyelitis. The other time he was walking on the side of his foot because the lower end had not been transferred to the lower end of the fibula. This has since been done.

Discussion on "A Series of Cases With Multiple Nerve Lesions," by R. L. Ash, and "Joint Lesions in Nervous Diseases," by H. C. Moffitt.

Dr. S. J. Hunkin.—I think we should feel greatly indebted to Dr. Moffitt for showing us many things which we did not know. This woman whom he has presented I saw many years ago and made a diagnosis of sarcoma. There was no question in my mind about it and I was very easily mistaken. I see very few joint cases due to nervous lesions. Once in a while I run across a knee case which I think is tabetic. I had never seen a hip which I thought was tabetic. I had a case of hysteria in a young woman about 17 or 18. She had spinal tuberculosis and had been treated for it. She had developed a hip joint lesion, and after some months developed some peculiar nervous symptoms which I recognized as hysteria. After a little while I decided that she had a hysterical hip. It took me about one minute and a half to cure her and she has remained well ever since. I have had several hysterical hip joints but none quite so well marked as that one. The girl had a swelling around the hip joint over 2 inches.

Dr. C. G. Levison.—Dr. Moffitt laid stress upon the possibility of error in diagnosis of Charcot's joint. I have seen a number of errors in that way. I have seen such legs amputated for osteoma. At the same time I feel that a surgeon who has a Charcot's joint will seldom make the mistake. During the last few years I have come in contact with a number of orthopedic conditions. The difficulty does not lie in recognizing the condition, but in recognizing a condition that is not a fully developed tabes. Under ordinary circumstances the surgeon examining a nervous case at once suspects an orthopedic condition, and looks for the knee jerk; if he gets a knee jerk he is satisfied that the patient is not suffering from tabes. As a matter of fact the neuropath to-day, if we have delayed knee jerk, if the Achilles reflex is absent or one or more sensory changes present, diagnose tabes. Mistakes are made in this way. These conditions will occur every once in a while in individuals with beginning tabes. The principal point is that we operate on patients with knee jerk which I believe at times are beginning tabetic conditions. Many of these cases do very well. We have the Charcot joint infection where we do not have surgical interference. My experience is that in these conditions we get fairly good surgical result.

Dr. D. A. Stapler.—Referring to neurotic edema, I saw a case in a young boy 15 years of age; after coming home from the baths he had a sharp pain in the penis. The penis swelled to three or four times its normel size. Next day the swelling was in the lower part of the right arm, and upper part of the forearm, which lasted several hours. The diagnosis was angioneurotic edema. Bromide of potassium may be used to advantage to prevent the recurrence of these attacks.

Dr. Emmet Rixford.—I am interested in the matter of diagnosis of these conditions. Recently I have had a patient in the City and County Hospital with Charcot's joint or neurotic condition of the joints of the foot with enormous hypertrophy. In that case the tabetic symptoms were in their incipiency. The knee jerk was present but there was slight interference with sensation in the lower extremity. There was no tabetic gait; there was hypertrophy of the bone about the attachment of the synoveal membrane to the joint. The man was almost unable to walk from the impingement of the bony process. There was really nothing to do for the case except amputation, which was done and the wound healed without trouble. The man has been well ever since as far as that particular condition was concerned. The patient whose radiograph was shown, with the tabetic elbow and shoulder, with great hypertrophy of bone, it was my pleasure to see with Dr. Reynolds and I was greatly interested in it. Of course this trouble is more frequent in the lower extremity than in the upper. With regard to surgical prognosis of such cases the clinical course is not comparable to ordinary infected elbow joints, which is a pretty serious matter when the infection is with the germ.

Dr. H. B. Reynolds.—The case justifies a little further description. The case was so typical that it really offered no difficulty in diagnosing after the condition was once thought of. It presented so many typical features that it may be well to go over them. The man came to the clinic complaining of an enormous swelling of the shoulder. It had come up, as Dr. Moffitt says, in the course of the night. He said in the history that the same thing had occurred in the elbow eighteen years before and the fact of its having occurred in the same sequence made me think the two were associated. Eighteen years before he had had an enormous swelling of the elbow coming on in the same way and in a short time the swelling had disappeared, and thereafter there was no interference with function and no pain. That it had gone on for the period of eighteen years, a slow growth, until this accident, is shown in the

radiograph. The shoulder was in the condition described and after thinking of various things, among which we considered sarcoma of the elbow joint, which we eliminated, we came to the conclusion that it was neurotic; syringo myelia which he had had for eighteen years. The symptoms consisted of atrophy of the entire ossii of the thumb and insensibility to pain and temperature in the whole left arm. Also some scoliosis which must have been one of the ordinary symptoms. The swelling of the shoulder was enormous; apparently in the shoulder as well as in the bursa around it. After staying in the hospital it gradually went down but did not entirely disappear. He left the hospital after some weeks and the joint will probably go on in the same way. The elbow presented hypertrophy and atrophy in the same joint. The shoulder was purely atrophic type. The upper end of the ulna hypertrophied. Radius not involved at all.

Dr. C. M. Cooper.—If one takes a number of locomotor cases it will be found that the large percentage occurs in the poorer classes. They all probably have had preliminary injuries. The important question is the treatment. I have seen several of these locomotor joints treated in different ways. Two or three of them were kept at perfect rest immediately following their occurrence and the effusion disappeared. I think the recognition of this kind of joint is important, in as much as with the proper kind of treatment we can get good results. I have seen two or three interesting cases at the hospital. There has been a man there supposed to have an osteo deformans of the spine. Impossible to bend and had to walk with sticks. There was a hyperactivity of the thyroid gland. He was treated with milk diet and sodium phosphate with the result that the rigidity disappeared. He is now able to walk about and can bend over. Samme with Parkinson's disease. We have a man with definite symptoms of Parkinson's disease, tremor, voice symptoms, arthritis in both hip and shoulder joints; but already on paying attention to the diet much of the rigidity has passed off and he is able to walk with one stick. We should all recognize the fact that with the proper kind of treatment at the proper time we can do a lot for these cases.

Dr. H. C. Moffitt.—There is a great deal to say on this subject, a great deal of the work should be emphasized. A great deal of work can be done in the early recognition of these joints by the X-ray, showing that although trauma may have a determining influence, there are changes in the bones. This early recognition and treatment will help in the non-production of the severe type. It is the joint before it becomes the typical joint which we must recognize. With regard to surgery; surgery is justifiable, and is demanded in many of these cases. It is necessary to emphasize that these joints are benignant. Many men have worked with suppuration in the wrists or elbows. They may discharge through sinuses. It is important to bear in mind that these sinuses may discharge quite a distance from the joint. There are cases reported operated upon without anesthetic. The patients feel the movement but no pain, and watch the course of the operation.

Paper by Dr. C. B. Spaulding: "Report of a Case of Pyelitis in Pregnancy: Remarks on the Vorhee's Bag."

In the discussion, Dr. Adelaide Brown said: "I have had some experience with these bags, and have failed once in a case of eclampsia. Left the bag in 18 hours, and at the end of that time there was no dilatation. The woman was a primipara, with tremendous edema of the whole body, and I think that the bag probably softened the cervix some, and descision was necessary. Except for that, these cases have been successful. We have used them a great many times."

Paper by C. F. Welty: "Radical Mastoid Operation, With Presentation of Two Cases."

Dr. Kaspar Pischel said, in discussion, that the ear surgeons are greatly indebted to Dr. Welty for drawing again the attention of the profession to the dangers of chronic otorrhea and to the importance of curing it by an operation. The operation must always be considered a serious one. Even the most experienced operators have sometimes injured the facial nerve.

Dr. Emmet Rixford.—This is a subject of the greatest importance. Of course a good deal of the matter can be best taken care of in a meeting of aurists and specialists; still the general bearings of the matter are of enormous importance. One point of importance is the danger of letting such chronic otitis media alone. Chronic otitis media is not necessarily tuberculosis, it is more apt to be a streptococcus infection, or myelitis. The trouble is how to treat these cases; if you do not operate, the patient is subjected to danger of cerebral infection. The bacteria will travel, and may set up a brain abscess. It is much better to do a radical operation. The cure in the radical operation will depend upon the thoroughness of the surgeon in removing not merely the dead bone, but in cleaning out the whole of the mastoid region, the cells which lie over the meatus as well as those behind. The operation is best done with the burr, by which you can have control of the field.

Dr. Thomas W. Huntington.—The doctrine that is preached here to-night is the correct doctrine for surgery in general. In any condition dependent upon a covered area of infection, the proper course is to uncover that area. I think that the early procedure is the proper one, and the one that should be carried into every department of bone surgery. I see no reason for the otologist standing upon different ground.

Dr. C. F. Welty.—It is surprising to me that more of these cases are not operated upon; that is the thing I cannot understand. The reason that I have read this paper here to-night is to get an expression from the general practitioner why these patients are not operated on. A certain number of these patients die every year right here. There are a certain number of specialists who do not advise operation. I think the only way to cure these patients is to operate on them. Treating them for a month or a few months does not get them well.

Unfinished business: Report of Dr. Allen, chairman of Executive Committee, read. Moved and seconded that the report be adopted and placed on file.

A substitute motion was made and seconded that a conference be held between the present Executive Committee and the Executive Committee nominated. Carried.

To the Members of the San Francisco County Medical Society, Gentlemen:—Your Nominating Committee herewith respectfully presents the following names to fill the various offices and committees for the ensuing term.

Signed, S. S. KAHN,
WM. FITCH CHENEY,
H. A. L. RYFKOGEL,
Committee.

President, Emmet Rixford; first vice-president, Philip King Brown; second vice-president, Lois Nelson; secretary, A. W. Hewlett; H. E. Alderson, nominated by W. F. Barbat, seconded by T. V. Huntington; assistant secretary, James Pressley; treasurer, F. R. Dray; librarian, W. I. Terry; trustees, H. Gibbons, Jr., W. W. Kerr, L. L. Dorr.

Committee on Admissions—W. Francis B. Wakefield, A. W. Morton, Morton Gibbons, Alfred Newman, Herbert W. Allen.

Committee on Ethics—George H. Evans, S. J. Hunkin, H. D'A. Power, E. G. Frisbie, D. A. Stapler.

Committee on Finance—E. L. Wemple, A. B. McKee, M. Krotoszyner.

Committee on Library—W. I. Terry, C. M. Cooper, C. Quinan.

Executive Committee—F. B. Carpenter, Geo. Blumer, Dudley Tait.

Committee on Public Health—H. A. L. Ryfkogel, E. S. Merritt, J. M. Williamson, W. A. Martin.

Delegates to the State Society—J. H. Barbat, Geo. Blumer, C. M. Cooper, W. F. Cheney, Emmet Rixford, J. Rosenstirn, H. A. L. Ryfkogel, H. M. Sherman, W. I. Terry, W. F. B. Wakefield.

Alternate delegates—M. Krotoszyner, F. G. Burrows, K. Pischel, J. M. Moss, H. C. Moffitt, R. L. Rigdon, L. Newmark, H. B. A. Kugeler, C. H. Rosenthal, Geo. Goodfellow, T. W. Huntington, Philip King Brown, Henry Harris, L. C. Deane, F. Ebright, H. D'A. Power, E. E. Kelly, D. A. Stapler, C. Quinan, H. Morrow.

The following delegates were elected last year for two years: J. A. Black, F. B. Carpenter, F. R. Dray, E. G. Frisbie, A. B. Grosse, S. J. Hunkin, C. G. Levison, C. S. G. Nagel, G. B. Somers, W. F. Southard.

Note of resignation from Dr. J. V. Middelton of Washington read. Moved that resignation be accepted.

Adjourned at 11:45.

Santa Clara County.

The meeting for the month of October was made the occasion for a general gathering of the physicians of the county, and was devoted to a discussion of the value of the state law, the method of its operation, and the general value of organization. (We will endeavor to publish a more extended report of this meeting in a subsequent issue.) Dr. Fowler read a paper giving his results with spinal anesthesia, which method he had employed 69 times without difficulty or complication. He considered it of the greatest value. The paper was discussed by Drs. Morton, Tait, Goodfellow and W. S. Thorne, of San Francisco. The meeting then adjourned to reconvene at the banquet table. An excellent supper was served, and Dr. Cothran presided as toast master. Drs. Simpson, Harris, Ulrich, Thorne, Tait, Jones, Goodfellow, Morton and Asay responded. Some of the remarks were both timely and valuable, and will be published later on in the JOURNAL.

Santa Cruz County.

The regular meeting of the Santa Cruz County Medical Society was held in Santa Cruz, October 10th, at 8 P. M. The program was as follows: "Medical Climatology and Balneology," by Dr. Sundberg; "A Demonstration of Typhoid Reactions in Blood and Urine," by Dr. Pope.

The following resolution was unanimously passed:

Whereas, After much labor on the part of the reputable physicians of the state of California, there has been enacted a law regulating the practice of medicine which aims to protect the people from the impostor and quack; and

Whereas, It has a tendency to raise the standard of medical education and promote the best interests of the medical profession; and

Whereas, the supreme court of California has upheld said law; therefore be it

Resolved, That the Santa Cruz County Medical Society does hereby express its approval of the law as it now stands, and most respectfully asks the candidates for state assemblymen from this county, George C. Cleveland and James B. Holohan, to pledge themselves that, if elected, they will work and vote against any bill to repeal or amend the law referred to.

EXETER P. VAUX, M. D., President.
SAXTON T. POPE, Secretary.

Sonoma County.

[The report of the October meeting reached us too late for publication this month, but will appear in the next issue, together with the report of the November meeting, when action is to be taken on the following resolution. It should provoke considerable discussion, and is of vital importance to every member of this vigorous and growing county society.]

The Sonoma County Medical Society will meet in Dr. Mallory's office, Santa Rosa, Cal., November 10th, at 8 P. M.

Subject, "The Good of the Medical Profession of Sonoma County." Leaders, Dr. A. B. Herrick and Dr. Smith McMullin. The following resolution will be considered, and probably voted on:

"*Be it Resolved*, That the members of the Sonoma County Medical Society do not enter into any contract with any lodge, association, corporation, society or individual for any consideration, whether same be money or otherwise, other than that named in the fee bill or schedule of prices adopted by this society. Also, that from and after the date of the passage of this resolution any violation of this will submit the violator to expulsion from the society, and deprive him or her from any of its benefits."

We want every member of this society to attend this meeting. G. W. MALLORY, Secretary.

California Academy of Medicine.

The regular meeting for September was held on the evening of the 27th, Dr. Huntington, president, in the chair. Dr. C. M. Cooper presented some patients. The first was a man probably having syphilis, in whom marked benefit followed the administration of thyroid gland extract instead of potassium iodid. The second patient also probably had had syphilis for 10 or 12 years. He was markedly ataxic. The condition might have been locomotor ataxia or pseudo-tabes of syphilitic origin. There was a tumor in the abdomen that might have been a gumma. He was given potassium iodid and mercury, and in about 14 days was nearly well. The third patient (not presented) had had severe headache for eight years, growing worse. The eyes, nose, etc., had received special attention, without relief. There was found hyperesthesia of the scalp. A skiogram was taken, and it showed that the patient was suffering from an osteo-sclerotic condition of the skull. The question presented itself whether surgical interference would be of any avail. Dr. Cooper also exhibited a skiogram of a knee joint into which iodized sesame oil had been injected. It showed very markedly the iodin deposited or retained in the joint.

Dr. Moffitt thought there was decidedly too much diagnosis of "functional" disorders; it often meant a lack of proper diagnosis. He cited a case similar to Dr. Cooper's, of an osteo-sclerotic condition. In discussing the subject generally, he expressed the opinion that there was more cerebro-spinal lues in San Francisco than in any other city in America. Dr. George Blumer spoke of a case of sclerosis of the bones in which he had found, at autopsy, a greatly enlarged pituitary body. Dr. George Evans discussed the use of iodized sesame oil, and gave an outline of his own experience with it, he having found iodin in the urine several months after discontinuing its use. Dr. Tait asked if spinal puncture had been resorted to as a diagnostic aid. Dr. Cooper said there was nothing to indicate akromegaly, and he hardly suspected it, though the possibility certainly did exist.

Dr. L. W. Allen read a paper entitled "Papilloma of the Colon Undergoing Malignant Degeneration." The report went to show that a patient having an abdominal tumor might be greatly reduced physically, yet recover sufficiently to permit of operative relief. Drs. Tait and Ophuls called attention to the general laxity of expression in the use of "papilloma" as defining neoplasms.

Dr. Dudley Tait presented and discussed the merits of a new analgesic, stovain (not patented), which he said had been discovered by some French chemists, and is now being used in Paris to determine its value.

It seems to differ widely from cocain, in that it acts as a vaso-dilator rather than a vaso-constrictor. Its toxic relation to cocain is as three to one, cocain being three times more toxic.

Dr. A. W. Hewlett gave a brief report of some experimental work to determine the part played by bile in the digestion of fats. When added to pancreatic juice, digestion of fats was very greatly quickened; he thought possibly it might make a proferment into a ferment. Pure lecithin he found would also greatly increase the digestion of fats by pancreatic juice.

On motion of Dr. Philip Mills Jones, the academy unanimously extended a vote of thanks to Dr. Harry M. Sherman for having so generously allowed the academy to meet in his offices for several years past. It was also moved and carried that gentlemen proposed for membership be invited to read a paper before the academy before action upon their applications.

San Joaquin Valley.

The San Joaquin Valley Medical Society held its eighteenth semi-annual session in Fresno, October 11th, with about fifty members and visitors present. The following program was carried out: "The Menopause," Dr. E. S. O'Brien, Merced; discussion opened by Dr. J. L. McClelland, Los Banos. "Infant Feeding," Dr. O. W. Steinwand, Selma; discussion opened by Dr. M. L. Pettitt, Visalia. "Injuries of the Head," Dr. P. Manson, Fresno; discussion opened by Dr. J. D. Davidson, Fresno. "Puerperal Infection," Dr. A. M. Smith, Merced; discussion opened by Dr. W. T. Barr, Fresno.

Since our last meeting our membership has been depleted by the loss of our esteemed co-worker, Dr. R. O. Phillips, of Kingsburg.

Whereas, By the death of our brother, this society has lost a valued and zealous member, one ever ready to lend his best endeavors for the interest of this society and the profession at large. He was ever faithful to the duties intrusted to him; he was always ready to aid his professional brothers to the extent of his ability. The community in which he lived and worked also has lost a true and faithful friend, who freely gave his time and service for their relief, and was ever ready and willing to answer a call and administer to their wants; therefore be it

Resolved, That a copy of these resolutions be spread upon the minutes of this society, published in the STATE JOURNAL, and a copy be sent to his family.

J. D. DAVIDSON,
P. N. RUSSELL,
R. E. BERING,
Committee.

The next meeting will be held at Merced in March.

The following were elected officers for the ensuing six months: President, Dr. W. E. Lilley, Merced; vice-president, Dr. H. St. G. Hopkins, Fresno; second vice-president, Dr. O. W. Steinwand, Selma; third vice-president, Dr. Furtney, Dinuba, the secretary, Dr. J. R. Walker, the assistant secretary, Dr. A. B. Cowan, and the treasurer, Dr. T. M. Hayden, holding over.

Dr. A. W. Morton, of San Francisco, was a visitor.

After an interesting and profitable session, the Fresno County Society tendered a banquet to the San Joaquin Valley Society and the guests.

J. R. WALKER, Secretary.

Pan-American Medical Congress.

Dr. Frank Adams, president of the State Society, has been requested to appoint delegates to the Fourth Pan-American Medical Congress, to be held in Panama from the 4th to the 7th of January, 1905. Dr. Adams makes the wise suggestion that those who think they can attend this meeting notify him so that he may appoint delegates who will be in attendance. If you intend to attend the Pan-American, notify Dr. Adams and go as a delegate.

ALCOHOL IN SUPPOSEDLY DECENT PROPRIETARY NOSTRUMS.

The following is an abstract of a paper by Dr. Charles Harrington, published in the *Boston Medical and Surgical Journal*, entitled, "The Composition and Alcoholic Content of Certain Proprietary Foods for the Sick":

In presenting this brief communication I propose to discuss neither the question of the food value of alcohol nor the advisability of the use of that agent as a remedy in the treatment of disease. It is my intention merely to offer the results of my examination of a number of preparations which are extensively advertised, and, inferentially, widely used, as foods for the sick and for convalescents, and to leave the question of their true nutritive and therapeutic value a matter for independent judgment.

My attention was drawn to this class of preparations by the fact that an invalid who was faithfully following the directions accompanying one of them was observed to be more or less constantly in a state of intoxication, for which condition no cause could be assigned, until the suspicion was directed to the food, which proved, on analysis, to contain a fairly large percentage of alcohol; and this suggested the advisability of obtaining specimens of other preparations for investigation.

"Liquid Peptonoids.—Beef, milk and gluten, perfectly digested" is said to contain the albuminoid principles of beef, milk and wheat. "In cases of feeble digestion and wasting diseases," its effects are said to be "immediate and pronounced."

Dose: For an adult, one or two tablespoonfuls, three to six times daily; children in proportion.

The maximum amount recommended for an adult will yield less than an ounce of nutriment and the alcoholic equivalent of 3.50 oz. of whisky per day.

Analysis shows 23.03 per cent by volume of alcohol, 14.91 per cent of total solids, and 0.17 per cent of mineral matter.

Panopepton.—This is said to contain "the nutritive constituents of beef and wheat in a soluble and freely absorbable form." "A nourishing, restorative, stimulant, liquid food of incomparable value for the nutrition of the sick;" "the best food in acute diseases, fevers, etc., in convalescence;" "a restorative from fatigue;" "a special resource against insomnia."

Directions: "For adults, a dessert-spoonful to a teaspoonful several times a day and at bedtime; for infants, a few drops to a half teaspoonful according to circumstances, as directed by the physician."

It yields 17.99 per cent of solid matter (including 0.97 per cent of mineral matter) and 18.95 per cent by volume of alcohol.

Hemapeptone.—This is said to be a preparation of "albumose-peptone," "the end product of digestion of albumin and hematin, a true organic iron."

One is advised to take a teaspoonful, increasing to a tablespoonful as needed, after each meal.

Analysis: Alcohol by volume, 10.60 per cent; total solids, 19.54 per cent; mineral matter, 0.37 per cent.

Nutritive Liquid Peptone.—This is said to be "a valuable combination containing the nutritive constituents of beef and malt, predigested and ready for assimilation," and to possess "the properties of a gentle and refreshing stimulant."

No dose is given. The analysis shows: Alcohol by volume, 14.81 per cent; total solid nutriment, 15.20 per cent; mineral matter, 0.69 per cent.

Hemaboloids.—The nutriment in hemaboloids is said to be "partially digested and vitalized by treatment with nuclein, rich in iron and phosphorous-producing elements." It is said to enrich the blood, to increase weight and the number of red blood cells, and to enhance nerve action. The preparation is said to consist of vegetable neucleo-albumin, reinforced by beef marrow extract and beef peptones, and is to be used in all impoverished conditions of

the blood, such as anemia, general debility and in convalescense from all diseases.

The dose recommended is one-half to one teaspoonful three to four times daily in a little water, plain or aerated, or with cracked ice. "If necessary, increase to two tablespoonfuls."

The maximum recommended yields about a quarter of an ounce of nutriment, and the alcoholic equivalent of about one ounce and a half of whisky daily.

Analysis shows 6.36 per cent of total solids (about half as much as is contained in milk of fair quality) and 15.81 per cent by volume of alcohol. The mineral matter, which is largely iron, amounts to 0.62 per cent.

Tonic Beef.—Tonic Beef is said to contain "the nutritive constituents of beef, wheat and fresh eggs in a soluble, predigested and hence readily absorbable form." One is led to believe that the beef is carefully selected, and that the blending of the constituents of these three very important foods, and their flavoring and aging (whatever that may mean in connection with eggs), have been conducted on most scientific principles. Adults are advised to take from half to one tablespoonful every four hours and at bedtime; infants and children should be given from ten drops to a teaspoonful, according to age.

A teaspoonful every four hours will yield to the consumer in the course of the day about a half ounce of nutriment and the alcoholic equivalent of an ounce of whisky, for analysis shows 15.58 per cent by volume of alcohol and 18.16 per cent by weight of residue, including 1.04 per cent of mineral matter.

Mulford's Predigested Beef.—"A concentrated predigested food containing the entire nutritive value of beef in a completely digested form, ready for immediate absorption into the system."

It is claimed for it that "it is a complete natural food product, containing sufficient nutritive materials to maintain normal nutrition of the body," and that it is "indicated as an exclusive diet in typhoid fever, la grippe, tuberculosis, nervous exhaustion and all conditions of the system associated with enfeebled digestion and malnutrition."

Dose: One to two tablespoonfuls in water every two or three hours, or as needed; children in proportion to age.

Analysis shows 19.72 per cent by volume of alcohol, 10.39 per cent by weight of total solids, which yield 0.20 per cent of mineral matter.

The maximum administration recommended, that is, two tablespoonfuls every two hours, disregarding the proviso "or as needed," would yield daily about 1.25 ounces of nutriment and the alcoholic equivalent of about six ounces of whisky, which might well be regarded as hardly adequate as an exclusive diet, in the diseases above mentioned or in any other condition of the system.

[Note.—One cannot but wonder whether the formulas of the above, filed with the *Journal of the A. M. A.* disclose the quantity of whisky equivalent contained in them.—Ed.]

NO DISEASE INSIGNIFICANT.

No disease should be looked on as insignificant. Nothing seems less becoming than to hear medical men speaking lightly of disease in general, or of any disease in particular. It is no consolation to the mother whose child has died of one of the rare complications of chickenpox to find that many physicians think that too trivial to concern themselves with. Nor does it increase confidence in the profession to have hysteria and neurasthenia considered imaginary and ridiculous evidences of perversity, while the impatience, not to say lack of scientific interest sometimes shown toward other less well-defined neuroses, undoubtedly has some relation with the crowded ranks of followers of "isms" of all kinds.—Dr. Dock, Oration on Medicine, A. M. A.

THE UTERO-SACRAL LIGAMENTS AND THEIR RELATION TO THE GENERAL PELVIC CONDITION, OF WHICH RETROVERSION OF THE UTERUS IS THE CHIEF SYMPTOM.*

By W. FRANCIS B. WAKEFIELD, M. D., San Francisco.

SIMPLE, mechanical retroversion of the uterus, uncomplicated by any other pelvic disturbance, is rarely, if ever, seen by the gynecologist. The few cases that appear to be uncomplicated would probably be found with an associated pathologic lesion, if painstaking search were made therefor.

I am inclined, in general, to accept Baldy's proposition that we cease to regard a retroverted uterus as a pathologic entity, but rather that we look upon it as one of the results produced by morbid pelvic conditions. The enumeration of these different diseased conditions does not form a part of this paper, but, in general, may be said to be anything that disturbs the normal pelvic circulation, inhibits the pelvic nerve supply, or produces abnormal pressure, by any of which means the natural tonicity of the supporting structures of the uterus may be weakened, permitting them to become relaxed.

If one considers carefully the anatomic construction of the uterine ligaments, one cannot help but be impressed with the importance of the utero-sacral ligaments as the chief factor in maintaining the uterus in its normal position. We have seven pairs of ligaments connected with the uterus, three pairs being peritoneal reflections, and generally termed false ligaments, and four pairs of true ligaments composed of fibro-muscular structure. The false ligaments are: the lateral or broad ligaments, the anterior or vesico-uterine ligaments, and the posterior or recto-uterine ligaments. The true ligaments are: the round ligaments, the utero-sacral ligaments, the utero-pelvic ligaments, and the utero-ovarian ligaments.

The false ligaments, while generally supportive in character, cannot be considered truly supporting to the uterus. They fail to contain the proper histologic elements necessary to secure adequate supporting power. Their function is of a three-fold character: 1. They form an elastic, bridge-like structure for the conveyance and support of the vessels and nerves supplying the uterus. 2. They serve to maintain normal anatomic relations between the uterus and the other pelvic organs. 3. They act as buffers in reducing pelvic friction to the minimum.

Now let us look at the true ligaments and see what supporting power they have. The round ligaments act as guys, allowing the uterus a free play of motion, and yet becoming taut if the uterine fundus be pushed back farther than an inch or an inch and a quarter. The utero-ovarian ligaments give no support to the uterus, but act as a support to the ovaries, holding them up in their normal pelvic plane. The utero-pelvic ligaments, passing from the pelvic fascia over the upper part of the internal obturator muscle to the sides of the uterus and vagina, limit the side play of the cervix, and, when acting in conjunction with the utero-sacral ligaments, help to maintain the natural uterine equipoise. The utero-sacral ligaments, attached to the upper part of the cervix at one end and to the upper and lateral aspect of the sacrum at the other, hold the cervix backwards and upwards, thereby promoting anteversion of the uterine fundus. It is quite obvious that it would be difficult for the fundus to become retroverted while the upper cervix is sustained in the direction of a line drawn from the internal os to the sacro-lumbar articulation.

To recapitulate, then, we have, under normal conditions, the round ligaments acting as an anterior stay to the fundus, limiting its backward displacement;

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

the utero-sacral ligaments preventing the upper cervix from forward dislocation, a mechanical force which has the effect of sustaining the fundus in anteversion; the utero-pelvic ligaments acting as lateral stays which tend to equalize the work of each utero-sacral ligament and to generally immobilize the cervix.

Of all these mechanical factors which contribute to the support of the uterus the utero-sacral ligaments far exceed the others in relative importance. Let pathologic conditions prevail, however, on account of which these ligaments lose their natural tone and become relaxed, and what happens? The normal plane of the cervix becomes altered and the cervix moves forward and upward towards the anterior vaginal wall, and, as the cervix swings forward, the fundus naturally swings in the opposite direction until, when the cervix occupies an acutely anterior position, the fundus has either turned completely backward, or we find it held partly forward by the round ligaments while the uterus as a whole is retroposed, and the maintenance of this position for any great length of time will so weaken the anterior supportive structures that they will relax sufficiently to permit the fundus to retrovert. The above picture of the gradual stretching out of the utero-sacral ligaments and the consequent production of retroversion I have been able to demonstrate in case after case, and the more I practice pelvic surgery, and the more I study the female pelvis, in both health and disease, the more impressed do I become with the importance of these ligaments as natural factors in maintaining normal uterine equipoise.

The rational operative treatment for the relief of retroversion of the uterus where operative treatment is necessary, consists, in my opinion, in the reconstruction of the natural ligamentary supports which have become relaxed to such a degree as to be no longer supportive. The combined shortening of the utero-sacral and round ligaments intra-abdominally appeals to me as the ideal procedure. The technic is comparatively simple, and the results most satisfactory. At the same time we have opportunity to care for whatever associated pathologic lesions may be present.

The method of shortening the utero-sacral ligaments which I practice is one suggested by A. P. Stoner. The uterus is drawn upward and forward in order to bring the ligaments into prominence, and each ligament is transfixed with a fine silk suture two to two and a half inches from its uterine insertion. Midway between these first sutures and the uterus the ligaments are again pierced with a fine silk suture. After slightly relaxing the traction on the uterus, the first or higher suture is drawn downward and anchored to the uterus and to the uterine attachment of the ligament. The lower suture is drawn upward toward the sacro-iliac junction and attached to its fellow. Thus the ligament is folded upon itself in a three-ply fold. The operation is completed by whipping the folds together with fine chromicized catgut. To promote firmer adhesions between the folds of ligament the edges may be treated with an application of a 1-500 solution of bichloride of mercury; but care should be taken to wipe dry any excess of the solution. The ligaments must be shortened just enough to place the cervix in an easy elevated position. This operation of itself is probably sufficient to hold the uterus securely in place. To make assurance doubly sure, however, it is wise to also shorten the round ligaments by one of the standard methods.

The method of shortening the round ligaments which I prefer is that suggested by J. Clarence Webster, and emphasized by J. M. Baldy, which consists in passing a pair of forceps through each broad ligament from behind, directly opposite the uterine insertion of the round ligament and close to the uterus, pulling through a loop of round ligament on each side, uniting these two loops with a fine silk suture, and attaching them to the lower posterior surface of the fundus with chromicized catgut.

In both of these maneuvers for shortening the ligaments one should be careful not to inflict any unnecessary trauma, or separate the overlying peritoneum from the ligaments.

DISCUSSION.

Dr. C. Krone, Oakland.—As a paper on the anatomical relations in the pelvis, I admire this paper exceedingly. It can hardly be under-emphasized that we should have these conditions continually in our heads. I also admire this paper very much from the standpoint of a gynecologist. One thing I would like to say in regard to the treatment: I would advocate, under certain circumstances, pelvic massage. I have seen and read about very interesting work in Munich and other places, and I feel quite sure that some cases, especially cases of retroversion and retroflexion, have been materially benefited by pelvic massage. I do not mean vaginal massage. There are great objections to pelvic massage because it is through the vaginal outlet, but great results can be obtained, and should be encouraged in selected cases. When constipation for years seems to be a symptom that can be ascribed to anything except retroversion of the uterus, I have found good results from massage for three or four weeks. When the ligaments are relaxed and do not hold the ovaries in the proper place, we can replace the ovaries. Even with cysts of the ovaries, which encourage us to immediate abdominal section, I think pelvic massage of these cysts is very good when you can exclude infection. The breaking of these cysts is done in a gentle way, and infection can probably not occur. I have seen dilated ovarian tubes aspirated, and with this dilation and disturbance I have also seen retroversion and retroflexion improved.

Dr. Wakefield.—I agree with Dr. Krone. This paper does not recommend operative procedure in all cases. General pelvic treatment should be given a faithful trial. I have practiced the manipulation suggested, and have found it most useful. I wish to impress upon your minds the fact that the utero-sacral ligaments are the important ones to be considered. I can tell, whenever I draw the cervix well down and feel the condition of these ligaments, whether the case will probably yield to palliative measures or whether it will be necessary to resort to operative procedures. They are very firm, fibrous bands, with very definite anatomic position. It is very easy to feel them, very easy to massage them and apply electricity to them, and very easy to shorten them by operative manipulation.

The Advertisements in the Journal of the American Medical Association.

The following editorial appeared in the August number of the California State Journal of Medicine, published by the Medical Society of the State of California, and edited by Dr. Philip Mills Jones. (Here follows the editorial from the August JOURNAL on the trustees of the A. M. A. and their conduct of the *A. M. A. Journal.*)

It is generally admitted by practically all members of the medical profession having average ethical sense that the advertising pages of the *Journal of the American Medical Association*, the representative and foremost medical journal of America, are a discredit to the organization, of which it is the official organ, and the arraignment by Dr. Jones is legitimate sequence to the course so long pursued by the trustees. May the journal of the Medical Society of the State of Pennsylvania never merit such an arraignment as this.—*Pennsylvania Medical Journal.*

SYNONYMS.

"Things which are equal to the same thing, are equal to each other."—*Axiom No. 1, p. 19 Davies' Legendre, Edition 1860.*

Few physicians know that many of the "new remedies" marketed under fanciful trade names are identical with remedies having dissimilar names, or are old preparations which have been given fancy names in order to create a false market for the thing in question. For the benefit of physicians and pharmacists the following table has been compiled and will be added to as the requisite information is obtained. The information is secured from chemists and from medical and pharmaceutical journals, and is correct in the main. Should any errors creep in they will be corrected as soon as detected. *Until sufficient evidence to the contrary is forthcoming, it must be assumed that there is no question of substitution involved when the pharmacist supplies a given article under any one of its synonymous names.*

Adeps lane hydrosus	Anasalpin, Lanolin, Lanum
Argentum Colloidale	Argentum Crede, Collargol, Colloidal silver
Beta-naphthol benzoate	Benzo-naphthol, Benzoyl-beta-naphthol
Beta-naphthol Salicylate	Betol, Naphtalol, Naphthosalol, Salinaptol
Bromacetanilid	Antisepsin, Asepsin
Bismuth-iodo-subgallate	Airol, Airogen, Airoform
Calcium beta-naphthol sulphonate	Abrastol, Asaprol
Creosote Tannate	Creosal, Tannosal
Dimethyl - ethyl - carbinol chloral	Dormiol, Amylene-chloral
Dithymol Diiodid	Aristol, Annidalin, Di Thymol Iodid, Di Iodo Dithymol, (And several other similar names.)
† Epinephrin	Adnephrin, Adrenalin, Adrenamine, Adrenol, Adrin, Caprenalin, Hemisine, Hemostatin, Sanguestine, Suprarenalin
Ethyl chlorid	Antidolorin, Ethylol, Kelene, Mono-chlor-ethane
Hexamethylene-tetramine	Aminoform, Ammonio-formaldehyde, Cystamine, Cystogen, Formin, Saliformin, Urotropin
", anhydromethylen citrate	Helmitol
Levulose	Diabetin, Fructose, Fruit Sugar
Ortho - ethoxy - ana - mono - benzoyl-amido-chinolin	*Benzanalgene, *Analgen, *Quinalgen
Paraphenetin carbamid	Dulcin, Sucrol
Phenyl-dimethyl-parazolon (Germ. Pharm.)	Analgesin, Anodynin, Antipyrin, Dimethyloxy-quinizin, Methozan, Phenazon (B. P.), Phenylon, Pyrazin, Pyrazolin, Parodyn, Salazolon, Sedatin
Phenylacetamide	Acetanilid, Antifebrin, (And several hundreds o trade names for head ache powders, etc.)
Phenylmethyl-ketone	Acetophenone, Hypnone
Plant pepsin	Papain, Papoid, Papayotin, Caroid
Salicylic acid ester of quinine	Salochinin, Saloquinin
Salicylate of Salochinin	Rheumatin
Sodium sulpho-caffeate	Nasrol, Symphoral
Thyroid gland, dried lactose trituration	Iodothyrine, Thyroidin
Trioxymethylen	Paraformaldehyde, Paraform, Triformol

Abrin = Jequiritin
Acetyl-salicylic acid = Aspirin
Aluminum aceto-tartrate = Alsol
Australian oil Eucalyptus = Flucol
Bismuth chrysophanat = Dermol
Bismuth phosphate (soluble) = Bisol
Bismuth pyrogallate = Helcosol
Bismuth subgallate = Dermatol
Bismuth beta-naptholate = Orphol
Calcium permanganate = Acerdol
Calcium salicylate = Colchicin
Catarin hydrochlorid = Stypticin
Chloreton, 1% solution = Aneson
Creosote carbonat = Creosotal
Diethylen-diamin = Piperazin
Dimethyl-xanthine = Theobromine
Guaiacol carbonate = Duotal
Laricinic Acid = Agaricin
Magnesium dioxid = Biogen
Oxyquinaseptol = Diaphtherin
Phenyl-ethyl urethan = Euphorin
Saccharin = Garanotose
Subgallate of bismuth = Dermatol
Sodium chlorate = Oxychlorine
Sodium beta-naptholate = Microcidin
Tang-Kui, Fl. extract = Eumenol
Trichloracetic acid, 50% solution = Acetocaustic

* Must be very cautiously used, if at all, for the physiologic action is not fully known, and this chemical is said to have very serious effect upon the heart and nervous system.

† See JOURNAL, June, 1908, page 178.